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ABSTRACT

Used in a cross-cultural study was the Attitude Behavior Scale-Mental Retardation (ABS-MR), designed to examine aspects of attitude-behaviors that are invariant, culturally determined, object determined, or situation determined, and multivariate relationships between these components. Data on structure, content, and determinants of attitudes of over 3,000 persons in seven countries were gathered. Concentrated upon were four groups: special education rehabilitation workers, regular teachers, parents of the retarded, and parents of the non-retarded. The instrument consisted of a facet theory derived six level attitude scale and questionnaire. Data are analyzed in terms of the relationship of attitude to the following predictor variables: values, knowledge of retardation, amount of contact with retarded, religiosity, age and education, openness to change, group membership, and multidimensionality. Data showed that attitudes at the action-behavior levels have an affective-value-contactual basis rather than a cognitive-knowledge one. Data also proved that the ABS-MR attitude-levels do exhibit a simplex structure, that selected variables are effective predictors of attitude-behaviors, that the ABS-MR can differentiate between groups having different degrees of favorableness of attitude, and that it is cross-culturally equivalent and comparable. (KW)

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Attitude Behaviors Toward Mentally Retarded Persons:

ED051602

A Cross Cultural Analysis

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by

John E. Jordan

College of Education
Michigan State University

1970

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PREFACE

Milton, the blind, who looked on Paradise!
Beethoven, deaf, who heard vast harmonies!
Byron, the lame, who climbed toward Alpine skies!
Rose Kennedy, mother, both to a retarded child and a President!
Who pleads a handicap remembering these?

The present research emerged from my 1968 Eleven-Nation Study but focuses on a different attitude object: i.e.--the mentally retarded.

Those who work locally, nationally, or internationally with mental retardation know the result: an inescapable involvement with the most "turned-on" group of parents and professionals in the world!

Throughout the seven[1] nations of this study, Belize (British Honduras), Brazil, Colombia, Germany, Israel, the United States, and Yugoslavia, I came to know at least a small part of the dynamics of being turned-on. One only hopes the "heat" is not consuming!

To that "one" person, whoever he or she may be, who was most responsible for lighting the fires of involvement, may you profit as much as you gave! Remember this kind of involvement is somewhat like the American type of road called a "turnpike": the entrances are few and a wrong exit is costly.

As in the Eleven-Nation Study, I owe a special debt of gratitude to Professor Louis Guttman, Scientific Director of the Israel Institute of Applied Social Research, Jerusalem, Israel, for his assistance in the facet theory and non-metric analysis aspects of the study. Without his help this report would not be.

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[1]Iran in process but not complete.

Having just participated in the Second Congress of the International Association for the Scientific Study of Mental Deficiency, Warsaw, Poland and the Seminar on Social Problems in Mental Retardation at the Third International Congress of Social Psychiatry--Zagreb, Yugoslavia, I pause here at the oldest University in the Western Hemisphere while attending the Third Inter-American Regional Seminar on the Mentally Retarded Child and remember the thoughts at the Institute of Defectology--Zagreb, on March 9, 1968:

> During the last five (now seven) years we have attempted to take up residence from the point of view of at least twelve nations (eight in this study); objectively, we can say we have slept in their beds, eaten at their tables, enjoyed their fellowship, debated with their students and professionals (and parents in this study), and learned to love, to live and to let live.... ....(Jordan, 1968, p. v),

and in this study to be turned on. We can only hope they were also turned-on by us and that the results of this study may help the cause of the mentally retarded--"to help a retarded person anywhere is to help all of them everywhere."

John E. Jordan
University of San Marcos
Lima, Peru
December 9, 1970

ATTITUDE-BEHAVIORS TOWARD MENTALLY RETARDED PERSONS:

A CROSS-CULTURAL ANALYSIS

by

John E. Jordan

College of Education

Michigan State University

1970

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ACKNOWLEDGMENTS

The statements made herein are solely the responsibility of the author. The research[1] could not have been completed, however, without the financial support of the following sources: the nations involved; Phi Delta Kappa-for the 1967 International Research Award, the Latin American Studies Center--Michigan State University, the Institute of International Studies in Education--Michigan State University; the Committee for Eastern European Studies--Michigan State University; Social and Rehabilitation Service, Department of Health, Education and Welfare; the U.S. Office of Education, and a number of dedicated doctoral students whose theses and challanges are an integral part of this monograph.

The author is also indebted to the following organization for informational support throughout the project: The President's Committee on Employment of the Handicapped, Washington, D.C.; the International Society for Rehabilitation of the Disabled, New York; the International League of Societies for the Mentally Handicapped, Bruxelles, Belgium; the National Association of Retarded Children, New York, the Agency for International Development--U.S. Department of State, and the Partners of the Americas, Washington, D.C.

The research was completed under Office of Education Cooperative Research Grant Number OEG-0-8-000126-0197, Project Number 7-E-126, U.S. Department of Health, Education and Welfare. The data from the United States and Israel are open to the public domain since they were gathered as a part of the research contract. All other data, including comparisons to them, are fully coyprighted.

---

[1]The data from the nations of the study presented herein will be used in a forthcoming book: Attitudes Toward Mental Retardation in Seven Nations: A Guttman Facet Analysis.

DECLARATION OF GENERAL AND SPECIAL RIGHTS OF THE MENTALLY RETARDED

Whereas the universal declaration of human rights, adopted by the United Nations, proclaims that all of the human family, without distinction of any kind, have equal and inalienable rights of human dignity and freedom;

Whereas the declaration of the rights of the child, adopted by the United Nations, proclaims the rights of the physically, mentally, or socially handicapped child to special treatment, education and care required by his particular condition.

Now Therefore

The International League[1] of Societies for the Mentally Handicapped expresses the general and special rights of the mentally retarded as follows:

Article I
The mentally retarded person has the same basic rights as other citizens of the same country and same age.

Article II
The mentally retarded person has a right to proper medical care and physical restoration and to such education, training, habilitation and guidance as will enable him to develop his ability and potential to the fullest possible extent, no matter how severe his degree of disability. No mentally handicapped person should be deprived of such services by reason of the costs involved.

Article III
The mentally retarded person has a right to economic security and to a decent standard of living. He has a right to productive work or to other meaningful occupation.

Article IV
The mentally retarded person has a right to live with his own family or with foster parents; to participate in all aspects of community life, and to be provided with appropriate leisure time activities. If care in an institution becomes necessary it should be in surroundings and under circumstances as close to normal living as possible.

Article V
The mentally retarded person has a right to a qualified guardian when this is required to protect his personal well-being and interest. No person rendering direct services to the mentally retarded should also serve as his guardian.

---

[1] 12 Rue Forestiere; Bruxelles 5 Belgium

Article VI
The mentally retarded person has a right to protection from exploitation, abuse and degrading treatment. If accused, he has a right to a fair trial with full recognition being given to his degree of responsibility.

Article VII
Some mentally retarded persons may be unable, due to the severity of their handicap, to exercise for themselves all of their rights in a meaningful way. For others, modification of some or all of these rights is appropriate. The procedure used for modification or denial of rights must contain proper legal safeguards against every form of abuse, must be based on an evaluation of the social capability of the mentally retarded person by qualified experts and must be subject to periodic reviews and to the right of appeal to higher authorities.

Above All: THE MENTALLY RETARDED PERSON HAS THE RIGHT TO RESPECT.

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CHAPTER 1

HISTORY OF THE ABS-MR[1] AND FACET THEORY

Attitude has been defined by Guttman (1950, p. 51) as a "delimited totality of behavior with respect to something." Most other definitions of attitude view it in terms of "predispositions" rather than as behavior per se. Guttman's behavioral definition is used herein as it is more operational and lends itself to a facet[2] theory analysis as developed below.

Bastide and van den Berghe (1957) proposed four types or levels of interaction with an attitude object which Guttman (1959) elaborated into a structural theory of belief and action (our attitude-behaviors) based on and defined by facets and elements of each level. Guttman defined four of these levels: (a) Stereotype, (b) Norm, (c) Hypothetical Interaction, and (d) Personal Interaction (Tables 1 and 2). "Attitude" in this schema thus ranges from the stereotypic level to the subject's actual self-reported behavior.

A comprehensive review of the literature (Jordan, 1968) on attitude studies indicated that four classes of variables seem to be important determinants, correlates and/or predictors of attitudes: (a) econ-demographic factors such as age, sex, and income; (b) socio-psychological factors such as one's value orientation; (c) contact factors such as amount, nature, perceived voluntariness, and enjoyment of the contact, and (d) the knowledge factor, i.e., the amount of factual information one has about the attitude object.

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[1]ABS-MR (Attitude Behavior Scale--Mental Retardation). See page ii for forthcoming book using the ABS-MR data.

[2]The reader should become familiar with the terms in the glossary.

Most of the research studies, however, were inconclusive or contradictory about the predictor variables and I have suggested (Jordan, 1968, p. 73) that the reason might be attributed to the fact that the attitude scales were composed of items stemming from different structures, i.e., from different levels of Guttman's sub-universes. Lack of control over which attitudinal levels are being measured seems likely to continue to produce inconsistent, contradictory, and non-comparable findings in attitude research - a situation that the Guttman facet theory approach may be able to at least partially resolve.

Numerous researchers[1] have demonstrated the significance of attitudes in the acceptance of handicapped persons in certain social and educational settings. Gunzburg (1958) states, however, that mental retardation, unlike physical disability, is to a large extent a social concept, created in part by the Industrial Revolution. Increasing technological complexity as well as the progress of medical and psychological science have undoubtedly led to increased rates of retardation, both absolute rates because of expanding population and better diagnosis and treatment, and relative rates through identification of those who, while perhaps able to function in a simpler society, are unable to cope with the complex demands of modern society.

Hutt and Gibby (1965) and Gunzburg (1958) have stressed the necessity for concern with the reactions of society to mental retardation. Many of the behavioral reactions of the retardate are learned reactions which are

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[1]Barker, et al, 1953; Berreman, 1954; Cowen, et al, 1958, 1964, 1967; Force, 1956; Gowman, 1957; Haring, et al, 1958; Jaffe, 1966, 1967a b; Miller, 1956; Murphy, 1960; Murphy, et al, 1960; Simmons, 1955; Rogers and Quigley, 1960; Siller, 1967a, 1967b; Soldwedel and Terril, 1957; Wright, 1960; Yuker, et al, 1966.

a function of his social environment (Cohen, 1963; Peckham, 1955). Moreover, the attitudes of society also influence the programs that are provided for adequate care, management, and rehabilitation. Greenbaum and Wang (1965) point out that the majority of retardates could be helped to lead socially useful and independent lives if they were able to obtain early the proper encouragement and guidance:

> The likelihood of their doing so depends in great part on the attitudes and conceptions of mental retardation held by the public in general, and in particular by those individuals who have direct contact with the mental retardate at significant times in life (p. 257).

Despite the importance of community attitudes, however, very little systematic research has been directed toward uncovering factors which are instrumental in the development of attitudes toward the mentally retarded. What importance can be attributed for different (Table 4) attitudinal levels to: (a) the amount of contact a person has had with the mentally retarded, (b) the value orientation of the person, (c) the amount of factual knowledge about retardation he possesses, (d) the demographic characteristics of the subject, and (e) the existing social structure within cultural or subcultural groups?

Extensive reviews (Gottlieb, 1971; Harrelson, 1969; Morin, 1969; Vurdelja, 1970) of studies on attitudes toward mental retardation indicated that none of the previous studies employed an attitude scale constructed on the basis of the structural theory proposed by Guttman (1959). Thus it is unclear what attitudinal levels, or sub-universes in the Guttman model were being measured in most, if not all, of these studies although examination of the items indicates that most of the scales fall at the stereotypic level in Guttman's paradigm (Table 4).

It is also likely that at least some of the previous studies were measuring mixtures of Guttman's facets; some were measuring facets not

included by Guttman in his model, while some were not measuring attitudes at all but fell more in the realm of achievement tests, since factual knowledge also was being assessed. Lack of control over facets being measured will likely continue to contribute to results which are not comparable, are inconsistent, and are at times contradictory. Much the same can be said, of course, with regard to lack of control over subject variables, but this problem appears to be more easily correctible, provided that instrumentation is adequate and comparable.

It is also of note that not one study was encountered which attempted to relate findings cross-culturally or cross-nationally. In fact, only three studies (Laing & Chazan, 1966; Schonnel & Watts, 1956; Schonnel & Rorke, 1960) were found in the American literature which were conducted in countries other than the United States.

The importance of mental retardation in national development is only recently being recognized. As stated by Berg (1968, p. 126): "New evidence suggesting a relationship between malnutrition and mental retardation should be a cause for major policy concern in a number of world capitals." The relationships between poverty, malnutrition, and intellectual development or maldevelopment is currently a pressing issue, domestically and internationally (Hospital Tribune, 1968; Block et al, 1970; Kunce & Cope, 1969). The research and publications of the Institute of Nutrition of Central America and Panama (INCAP) in Guatemala City, Guatemala attest to the importance of the relationships between mental retardation and national development as does also the research connected with the Green Revolution from the Brookings Institute in Washington, D. C.

The proceedings[1] from the Third Inter-American Regional Seminar on Mental Retardation of December, 1970 will soon be available and contain

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[1]To be available from: Mental Retardation Section, Inter-American Childrens Institute, Av. 8 de Octobre 2882, Montevideo, Uruguay.

valuable information on relationships between malnutrition and mental retardation and its implications for national development--both for the more "affluent" and "poorer" sectors of the hemisphere.

Although no clear consensus existed in the review of literature, the review (Jordan, 1968) does indicate that numerous predictor variables do seem to be related to attitudes toward mental retardation, i.e., sex, education, social class, religion, occupation, amount of knowledge, general value orientation, and contact or experience. Few of the studies, however, attempted to control systematically more than one or two of these variables or to relate verbal attitudes to actual action. It seems clear that research is needed which attempts to control systematically these predictor variables across various groups, cultures, and nations if fruitful and generalizable findings are to ensue concerning attitude-behaviors toward mentally retarded persons.

The ABS-MR

The construction of the ABS-MR was guided by a facet design (Tables 1-26 and Figures 1-3) which makes it possible to construct items by a systematic a priori method instead of by the method of intuition or by the use of judges. Facet theory (Guttman, 1959, 1961, 1970) specifies that the attitude universe represented by the item content can be substructured into semantic profiles which are systematically related according to the number of identical conceptual elements they hold in common. The substructuring of an attitude universe into profiles facilitates a sampling of items within each of the derived profiles, and also enables the prediction of relationships between various profiles of the attitude universe. This should provide a set of clearly defined profiles for cross-national, cross-cultural, and sub-cultural comparisons.

In spite of his earlier work in 1959, Guttman in 1966, in reporting on the development of "analytical and mechanical ability tests," stated: "This is the first time a methodology based on facet theory is systematically used in test development (p. 1)."

The notion of facets and their application to the development of tests has been extensively discussed by Guttman (1965, 1966). In the development of the joint dimension (i.e., levels of "strength") of the ABS-MR five sets of elements, A through E, are called facets, and their Cartesian space is the set of all combinations of a b c d e, where a is an element of A --- and e is an element of E. A Cartesian space may consist of any number of facets, or sets of elements; with n facets, any one point in the Cartesian space has n component elements.

The simplex analysis (Table 8) of the relationships between the six levels of the ABS-MR shows that the facet definition of the levels determine their position within the space, i.e., the correlational structure of the joint dimension of the ABS-MR is largely predictable by the relationship between subject and object as defined by an a priori faceted definition.

In a reanalysis of research by Bastide and van den Berghe (1957), Guttman (1959) proposed that in respect to intergroup behavior there are three necessary facets which may be combined according to definite procedures to determine the element composition of eight important profiles of an attitude universe. Guttman's facets are presented in Table 1.

Table 1

Guttman's Facets Used to Determine Component Structure of an Attitude Universe

(A) Subject's Behavior	(B) Referent	(C) Referent's Intergroup Behavior
a_1 belief	b_1 subject's group	c_1 comparative
a_2 overt action	b_2 subject himself	c_2 interactive

One element from each and every facet must be represented in any given statement, and these statements can be grouped into profiles of the attitude universe by multiplication of the facets A x B x C, yielding a 2 x 2 x 2 combination of elements or eight semantic profiles in all, i.e., (1) $a_1b_1c_1$, (2) $a_1b_1c_2$.....(8) $a_2b_2c_2$. It can be seen that profiles 1 and 2 have two elements in common (a_1b_1) and one different (c_1 and c_2), whereas profiles 1 and 8 have no elements in common.

The capital letters A, B, and C depict the three facets, while the subscripts denote the respective elements. Thus $a_1b_1c_2$ reads: Belief (a_1) of a subject that his own group (b_1) interacts (c_2) with a specified attitude object. Similarly, $a_2b_2c_2$ reads: Self or observed reports of a subject's overt action (a_2) of himself (b_2) interacting (c_2) with a specified attitude object.

Using the Bastide and van den Berghe (1957) research, Guttman was able to facetize the semantic structure of their four attitude levels as shown in Table 2.

Table 2

Guttman Facet Profiles of Attitude Subuniverses

Subscale Type-Level	Subuniverse	Profile
1	Stereotype	$a_1b_1c_1$
2	Norm	$a_1b_1c_2$
3	Hypothetical Interaction	$a_1b_2c_2$
4	Personal Interaction	$a_2b_2c_2$

The model in Table 2 depicts attitude-behaviors ranging from a Stereotypic level to Personal Interaction. A common meaning for the orderings was suggested by Guttman, i.e., they show in each case a progression from a weak to a strong form of behavior of the subject vis-a-vis the attitude object. That is, the more subscript "2" elements a profile contains the greater the strength of the attitude.

Facet analysis of the semantic structure provides a social psychological basis for predicting the structure of the empirical intercorrelation matrix of the above four levels.

> One cannot presume to predict the exact size of each correlation coefficient from knowledge only of the semantics of universe ABC, but we do propose to predict a pattern or structure for the relative sizes of the statistical coefficients from purely semantic considerations (Guttman, 1959, p. 324).

This prediction was stated by Guttman as the Contiguity Hypothesis: Subuniverses closer to each other in the semantic scale of their definitions will also be closer statistically. In other words, the intercorrelations should reveal a simplex ordering so that the maximum predictability of each level is attainable from its immediate neighbor or neighbors

alone. This predicted relationship has been obtained for the ABS-MR scale (Tables 8 and 29) as well as by Erb (1969), Foa (1958, 1963), Frechette (1970), Guttman (1961), and Williams (1970) on other attitude objects.

It has been suggested elsewhere (Jordan, 1968, p. 76) that the facets proposed by Guttman need to be expanded. This more inclusive set of facets and their elements is stated in Tables 3 and 4. Table 5 depicts the relationship between the Guttman four-level and the Jordan six-level facet systems.

Table 3

Jordan Facets Used to Determine Joint[a] Struction of an Attitude Universe

(A) Referent		(B) Referent Behavior		(C) Actor		(D) Actor's Intergroup Behavior		(E) Domain of Actor's Behavior	
a_1	others	b_1	belief	c_1	others	d_1	comparison	e_1	symbolic
a_2	self	b_2	action	c_2	self	d_2	interaction	e_2	operational

[a]Joint struction is operationally defined as the ordered sets of the five facets from low to high (subscript 1's are low) across all five facets simultaneously.

Table 4

Joint Level, Profile Composition, and Labels for Six Types of Attitude Struction

Subscale Type-Level	Struction[a] Profile[b]	Descriptive Joint Term
1	$a_1\ b_1\ c_1\ d_1\ e_1$	Societal Stereotype
2	$a_1\ b_1\ c_1\ d_2\ e_1$	Societal Norm
3	$a_2\ b_1\ c_1\ d_2\ e_1$	Personal Moral Evaluation
4	$a_2\ b_1\ c_2\ d_2\ e_1$	Personal Hypothetical Action
5	$a_2\ b_2\ c_2\ d_2\ e_1$	Personal Feeling
6	$a_2\ b_2\ c_2\ d_2\ e_2$	Personal Action

[a]See Tables 14-26 and the ensuing discussion for the rationale concerning the different orders possible for the facets of Tables 3 and 4.

[b]See Table 22 for presentation of profiles arranged by both "definitional statement" and "facet change" to produce a simplex.

Table 5

Comparison of Guttman and Jordan Facet Designations

Author	Facets in Jordan Adaptation				
	A	B	C	D	E
Jordan	Referent	Referent behavior	Actor	Actor's intergroup behavior	Domain of actor's behavior
	a_1 others	b_1 belief	c_1 others	d_1 comparison	e_1 symbolic
	a_2 self	b_2 overt action	c_2 self	d_2 interaction	e_2 operational
Guttman	---	Subject's behavior	Referent	Referent's intergroup behavior	----
	----	b_1 belief	c_1 subject's group	d_1 comparative	----
	----	b_2 overt action	c_2 subject himself	d_2 interactive	----

CHAPTER 2

ABS-MR TEST DEVELOPMENT DATA

From a "theory of content" dictated by Figures 1 & 3, generalized into Figure 2, and structured into six levels or subscales by Table 3, 20 items were constructed for each of the six levels for a total of 120 items. A measure of intensity was also constructed for each of the items, the attitude scale thus comprised 240 items. Sixty additional items of demographic, contact and related data, value orientation, and knowledge about mental retardation were developed for a total of 300 items per subject. The data are presented as variables in Table 6 with an abbreviated meaning for each (See items in Appendix A.3 for details of directionality and nature of item foils).

Administration Procedures

The ABS-MR was designed for group administration but can also be administered individually. The instructions are simple and straightforward and the scale requires a reading level of about fifth grade.

Usual test administration procedures of privacy and lack of distracting stimuli should be followed. In some of the underdeveloped nations, experience shows that participants seem to understand better if the covering page of instructions is read verbally to them by the person administrating the scales. This is likely due to the verbal nature of much of the educational process in such nations, the relative inexperience in taking standardized tests, and the scarcity of written material.

Subjects

The ABS-MR was administered to three groups in the test development study: (a) 88 Michigan State University (MSU) graduate students (46 female, 42 male)

Table 6

Variables[a] Used in the Cross-Cultural Mental Retardation Study

Variable[a] Number and name		Range of scores	Meanings[b] In Item Categories
1-5	Attitude content	20-60	less to more, not approve to approve
6	" "	20-57	no experience to experience
8-13	Attitude Intensity	20-80	not sure to sure
15	Efficacy-Content	9-36	strongly disagree to strongly agree
16	Efficacy-Intensity	9-36	not sure at all to very sure
17	MR Knowledge	0-16	factual knowledge about MR
18	HP Amount	1-5	less 10 contacts, 10-50, 50-100, 100-500 500+
19	HP[c] Avoid	1-5	could not avoid contact to voluntary contact
20	HP Income	1-5	no exp., less 25%, 26-50%, 51-75%, over 76%
21	HP Alternatives	1-5	from no other job available to chose to work with
22	MR Amount	1-5	less 10 times, 10-50, 50-100, 100-500, over 500 times
23	MR Enjoy	1-5	no exp., def. dislike, not much, like some, def. enjoy
24	Age	1-5	under 20, 21-30, 31-40, 41-50, 50+
25	Educ. Amount	1-5	6 or less years, 9 or less, 12 or less, some college, a degree
26	Religion Import.	1-5	prefer NR, no rel. not very imp., fairly imp.,very imp.
27	Religion Adher.	1-5	prefer NR, no rel., sometimes, usually, ab. always
28	Self Change	1-4	difficult, slightly diff., easy, very easy
29	Child Rearing	1-4	str. disag., sl. disag., sl. agr., str. agree
30	Birth Control	1-4	al. wrong, us. wr., prob. right, al. right
31	Automation	1-4	st. disag., sl. disag., sl. ag., st. agree
32	Political Lead.	1-4	st. disag., sl. disag., sl. ag., st. agree
33	Rule Adher.	1-4	agree st., ag. sl., disagree sl., dis. st.
34	Local Aid	1-4	st. disag. to st.agree on local finance of educ.
35	Federal Aid	1-4	st. disag. to st. agree on federal finance of educ.
36	Ed. Planning	1-4	educ. planning, church to state and local to federal

[a]Consult the ABS-MR questionnaire for full details of items.

[b]All the items in the six attitude scales are scored such that a higher number implies "favorableness." Thus item category number "3" could be "agree or disagree," "less or more," depending on the directionality of the item stem.

[c]HP=Handicapped persons - i.e., in general, not restricted to MR.

in a course on medical information for special education or rehabilitation counselors-SER; students who were studying to be professionals in the area of disabling or handicapping conditions, (b) ED 200 -- 633 regular education students during the 1968 winter term, and (c) 523 elementary school teachers (381 female, 142 male) in Belize (British Honduras). The groups (Table 13) were chosen on the basis of a presumed difference in age, education, cultural orientation, as well as knowledge and experience regarding retardation. See Appendix A.5 for data on additional groups of subjects.

Scoring Procedures

The ABS-MR yields six subscale scores and was constructed to permit the administration of the entire scale or any one of the six subscales separately.

As pointed out by Harrelson (1969), parents of the non-retarded and teachers of the retarded in Germany achieved approximately the same total score but differed markedly on all of the various levels of the ABS-MR. The total score can thus often be quite deceiving and invalid. In view of these limitations the total score should either not be used at all or used only when comparing groups or individuals whose subscale scores "order" approximately in the same manner.

The subscale content scores are obtained simply by summing the response categories for the 20 items at each level. Table 6 contains the range of scores for each variable used in the ABS-MR. Each subscale of the ABS-MR can be scored separately for content and intensity or combined into one score via the procedures developed in Table 7. This report uses content only but the forthcoming book will use both procedures.

Table 7

Combined Content-Intensity Scoring Procedure[a] for MBS-MR Levels 1-6

Combined Scores: Levels 1-5				Combined Scores: Level 6			
Content	Intensity	Combined	Rationale	Content	Intensity	Combined	Rationale
0	1	0	Deleted from analysis because	0	1	0	Deleted from analysis because
0	2	0	attitude direction was inde-	0	2	0	attitude direction was inde-
0	3	0	terminable	0	3	0	terminable
				0	4	0	
1	0	2	Intensity error assumed and	1	0	2	Intensity error assumed and
2	0	5	neutral intensity score of	2	0	5	neutral intensity score of
3	0	8	2 assigned	3	0	8	3 assigned
1	3	1	Strong negative attitude	1	4	1*	Pleasant to have had no experience
1	2	2	Medium negative attitude	1	1	2*	No experience
1	1	3	Weak negative attitude	1	3	2*	In between to have had no experience
				1	2	3*	Unpleasant to have had no experience
2	1	4	Weak neutral attitude	2	2	4	Uncertain but unpleasant experience
2	2	5	Medium neutral attitude	2	3	5	Uncertain but in between experience
2	3	6	Strong neutral attitude	2	1	5*	Unlikely to occur-see footnote
				2	4	6	Uncertain but pleasant experience
3	1	7	Weak positive attitude	3	2	7	Definite experience but unpleasant
3	2	8	Medium positive attitude	3	3	8	Definite experience and in between
3	3	9	Strong positive attitude	3	1	8*	Unlikely to occur-see footnote
				3	4	9	Definite pleasurable experience

[a]Procedure

"Content" Alternatives	"Intensity" Alternatives
0 - no response	0 - no response
1 - negative attitude	1 - weak intensity
2 - neutral attitude	2 - medium intensity
3 - positive attitude	3 - strong intensity

"Content" Alternatives	"Intensity" Alternatives
0 - no response	0 - no response
1 - never have had experience	1 - no such experience
2 - uncertain whether have had experiences	2 - experience was unpleasant
	3 - experience was in between
3 - yes, have had this experience	4 - experience was pleasant

*It will be noted that the scoring procedure is not as logically sequential on level 6 as on levels 1-5. The difficulty arises from the additional "intensity" alternative on level 6 not found on levels 1-5 and from the fact that the analyses were all programmed on the basis of the scoring procedure used on levels 1-5. Because of difficulties encountered in changing entire computer programs to adjust for the additional intensity variable on level 6, it was decided to "program in" the fourth intensity alternative to the already existing programs and the scoring procedure shown above for level 6 is the result of this decision. The combinations with asteriks above are extremely unlikely to occur other than through chance error because of the inherent logical contradictions in these combinations. It will be noted that remaining combinations maintain the same negative-to-positive direction and range (1-9) as the scores on levels 1-5. Thus, the scoring system for level 6 represents a compromise between the ideal and the practical (adapted from Harrelson, 1969).

Variables

All variables of the ABS-MR are scored such that a higher numerical score represents a greater amount of the variable:

1. Higher attitude "content" scores indicate a more favorable or positive attitude.

2. Higher attitude "intensity" scores indicate greater intensity or certainty.

3. Higher efficacy scores indicate a sense of greater control over man's evnironment.

4. Higher knowledge scores indicate more factual knowledge about mental retardation.

The concept or continuum implied in the contact, demographic, change orientation, and education variables (numbers 18-36, Table 6) can be ascertained from examining the content of the items in the ABS-MR questionnaire in Appendix A.3.

The scores of all the variables can be analyzed from two viewpoints: (a) in comparison to the range of scores possible on the variable - i.e. contained in Table 6 and (b) by comparison to norm[1] groups in tables in Appendix A.5.

It will be noted that the range of scores on subscale 6 (Personal Action) differ from subscales 1-5 and that scores on intensity for subscale 6 also differ from the other intensity scores. Examination of the individual items in subscale 6 indicates that some have only two alternatives on content rather than three as on the other five intensity subscales.

The "combined" content-intensity range-of-scores is presented in Table 7 and the data will be analyzed both by attitude content-alone

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[1]Other groups are being gathered and will be available on request. The author requests users of the ABS-MR to forward additional norms to him for distribution to others on request.

and by combined content-intensity in the forthcoming book (see page ii) to enable a user of the ABS-MR to have norm comparison groups by either procedure.

ABS-MR Instrument Limitations[1]

For a number of reasons, among which may be counted the press of the experimental nature of the scale development aspects of the research and the newness of the facet theory technique, which precluded falling back on established research for guidance, several shortcomings in the ABS-MR scale are readily apparent. Among these shortcomings or limitations may be mentioned the following: failing to control for (a) response sets, (b) social desirability, (c) homogeneous lateral struction or item content on all levels, (d) alternative permutations of the facet elements, and (e) the effect of the order of scale administration on correlation matrices.

One of the first problems in the development of the ABS-MR scale revolved around the assignment of response weights. The question essentially was: "which is the 'best' or most favorable response--to say that the mentally retarded are equal to or superior to other people in some positive manner or, stated differently, which is the 'best' attitude--the most realistic one or the one denoting the most positive evaluation without necessarily being grounded in reality considerations?" It was decided finally to weigh the items on a negative to positive evaluative dimension without concern for which is necessarily the most "realistic" response since there seemed to be more inherent difficulty in defining "reality" in this regard than in defining "positive evaluations." Thus, the most "favorable" response is not always the most "realistic" response.

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[1]Credit is due to Harrelson (1969) for much of this section.

It was decided that three alternatives would generally be presented to each question, one alternative suggesting a negative evaluation, one a neutral evaluation, and the third a positive position. Ideally, the questions and responses would have been worded so that the negative, neutral, and favorable responses would have been randomly assigned to the three numbered alternatives. Thus ideally, the most favorable response on one question would be alternative 1, while on another it would be alternative 3, and so on in a random fashion. Because of the press of time and logistical problems in cross-cultural organization of the data and computer programming, however, the responses were set up so that alternative 1 always represented the least favorable response, alternative 2 always represented a neutral position and alternative 3 always represented a favorable position. In such a scheme there exists, needless to say, a real danger of error due to response sets, or the tendency of some of the subjects to answer all of the questions in a similar fashion independent of the content of the particular item. However, the format of the items were such that the respondant alternatively answered attitude content items and intensity responses to the item. The format of the answers were designed to "break up" response set. The fact that the simplex was obtained so often is also evidence that response set was not determining.

Attitude scales of this type are also susceptible to the analagous pressure of social desirability influencing various responses. This problem has been extensively discussed and the only way out of this dilemma with an instrument of this type appears to be through guaranteeing the subjects complete anonymity. Whether or not this procedure represents an adequate solution to the problem, however, remains a moot question.

It has also been noted in the development of the ABS-MR scale that the lateral struction or item content was not as well controlled as the joint struction or attitude level. This was particularly true with regard to Level 5 which was not structured on the lateral dimension at all. Lateral struction was also relatively uncontrolled on the other levels of the ABS-MR, which is to say that the various sub-scales or levels include items of different content so that the same content does not necessarily appear on all levels. Hamersma (1969), in a study of racial attitudes, employed an instrument based on Guttman facet theory in which the content of each attitude item is repeated across all six levels or subscales, with the item being altered only to fit the structure (joint struction) of the different levels. In this manner, the item content was more easily assessed than in the present research. The fact that the simplex was obtained in so many instances with the ABS-MR indicates, however, that the "unstructured" nature of the content was largely overridden by the more powerful structioning contained in the directions for each of the six levels of the ABS-MR.

It was also previously noted that multiplication of the two elements in each of the five joint struction facets yielded a possible 32 combinations or permutations of elements. The six level permutations of the ABS-MR scale were orginally selected primarily through subjective judgment. Maierle (1969) has extended research in this area and found that of the 32 permutations which might be formed, only 12 were semantically consistent. Maierle found that varying numbers of these permutations belong to different levels; that is, if a level is defined by the number of strong or weak elements found in the attitude items of that level, then one permutation exists on Level 1 of the ABS-MR, three on Level 2, four on Level 3, two on Level 4, and one permutation each on Levels 5 and 6.

The violations of simplex orderings previously noted in the standardization data may have been due in part to the fact that four permutations are possible on Level 3, the level on which most of the violations of simplex ordering have been found to date.

Another question related to simplex ordering which had been unanswered until Maierle's (1969) research has to do with the effect of the order of scale level administration upon the resulting correlation matrix. In the present study, as in all of the previous research in this area, all of the data have been obtained from administration of various level member subtests in the same order, i.e., all items of Level 1 have been presented first, all items of Level 2 presented second, and so forth. Maierle (1969) randomly varied the order of scale level presentation of a new Guttman facet type attitude scale to a large group of subjects and found that a better simplex approximation was obtained when correlations were plotted according to theoretical relationships than according to order of administration, thus lending further support to the theoretical assumptions involved in the ABS-MR.

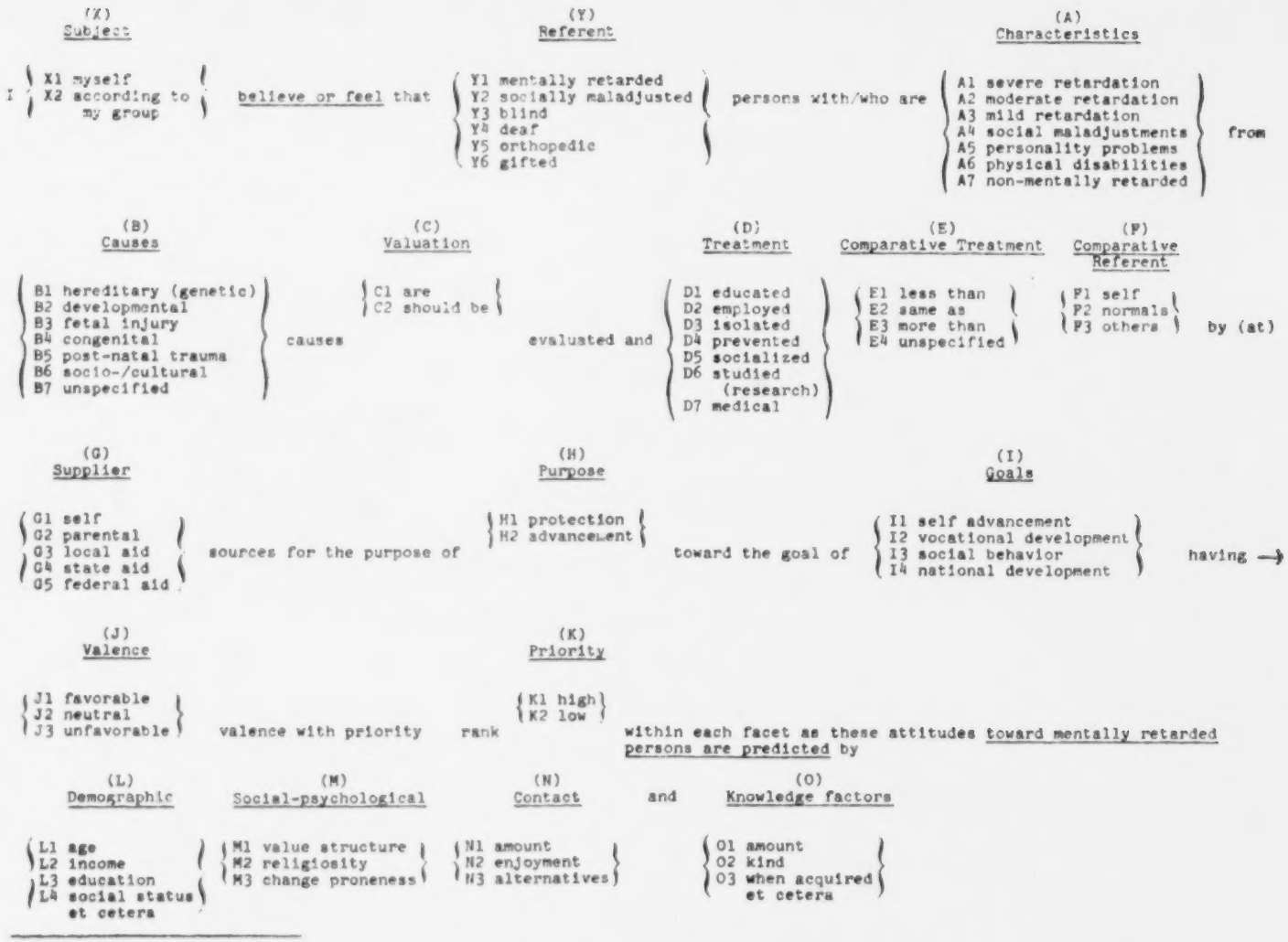
FACET THEORY SCALE CONSTRUCTION

Guttman's facet theory implies a different approach to scale construction than the usual "item analysis, reliability, and validity" approach. The mapping sentences of Figures 1-3 impose a semantic meaning on the content of the items, hopefully an "ordered" one, and the paradigms of Tables 3 and 4 specifically impose a structioned ordered meaning system for the relationships between the six scale levels.

As developed more fully in Chapter 3, the Cartesian product of the five/two-element/facets of Table 3 yield 32 possible profiles. As shown in Table 4, six of these profiles were chosen as psychologically relevant,

Figure 1

A Mapping Sentence for the Facet[1] Analysis of Attitudes Toward Mentally Retarded Persons.



[1]The facets were evolved in cooperation with twenty practicing school psychologists who were working primarily with the mentally retarded and who were in a graduate seminar at Michigan State University; Spring, 1967. The content validity of the appropriateness of the facets (A through I) can be assumed as these psychologists stated that these facets represented the major issues in their work with the mentally retarded.

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June 1, 1967

Figure 2

A Mapping Sentence[1] for the Facet Analysis of Joint[2] and Lateral Struction of Attitudes Toward Specified[4] Persons.

	(A) Referent		(B) Referent Behavior		(D) Actor	(E) Domain of Actor's Behavior
Subject (x) attributes to referent	a_1 others: pop. as a whole; non-disabled; parents of disabled; Negro, Jew, etc. a_2 self	the referent behavior of	b_1 belief b_2 overt action	and that the actor	c_1 others: pop. as a whole; non-disabled; parents of disabled; Negro, Jew, etc. c_2 self	e_1 symbolically: would; ought e_2 operationally: does

(D) Actor's Intergroup Behavior		(F) Life Situations		(G) Importance	
d_1 compares: compare (with) d_2 interacts with: specially help; hire; respond to (feel)	"specified" persons in	f_1 personal traits f_2 primary group relations f_3 recreation f_4 education f_5 employment f_6 health, welfare, & legislation f_7 sex and family f_8 secondary group relations	involving	g_1 high g_2 medium g_3 low	level of importance under condition (y)

(H) Evaluation Process		(I) Trait Type	(J) Trait Level	(K) Valence	
h_1 with respect to h_2 because of h_3 despite	their	i_1 cognitive i_2 affective i_3 instrumental: (physical); (behavioral); (coping)	J_1 attributed trait (e.g. handicap) J_2 actual trait (e.g. disability)	k_1 positive k_2 negative	valence toward "specified" persons.

[1] Based on mapping sentence of March 7, 1968.

[2] Facets "A" through "E" denote Joint Struction or level.

[3] Facets "F" through "J" denote attitude content or Lateral Struction. The ordering system has not yet been developed for Lateral Struction as for Joint Struction.

[4] Any person or social group such as aged, blind, alcoholic, Negro, national or ethnic group may be substituted for the disabled.

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August 10, 1966

FIGURE 3

A Mapping Sentence[a] of the Joint, Lateral, and Response Mode Struction Facets Used to Structure the Attitude Behavior Scale-Mental Retardation

JOINT STRUCTION

	(A) Referent		(B) Referent Behavior		(C) Actor	(D) Actor's Intergroup Behavior	(E) Domain of Actor's Behavior
(Subject attributes to)	a_1 others a_2 self	(the)	b_1 belief b_2 experience	(that the)	c_1 others c_2 self	d_1 compare (s) d_2 interact (s)	e_1 hypothetically e_2 operationally

LATERAL STRUCTION

	(F) Life Situations		(G) Importance		(H) Evaluation Process	
(with the mentally retarded in)	f_1 personal traits f_2 primary group relations f_3 recreation f_4 education f_5 employment f_6 health, welfare and legislation f_7 sex and family f_8 secondary group relations	(involving)	g_1 high g_2 medium g_3 low	(level of importance)	h_1 with respect to h_2 because of h_3 despite	(their)

RESPONSE MODE STRUCTION

(I) Trait Type	(J) Trait Level		(K) Valence		(L) Intensity	
i_1 cognitive i_2 affective i_3 physical-behavioral	j_1 attributed handicap j_2 actual disability	(with)	k_1 negative k_2 neutral K_3 positive	(valence and)	l_1 low l_2 medium l_3 high	(intensity)

[a]Adapted from Harrelson (1970)

potentially capable of instrumentation, and possessing a specific relationship between themselves - a simplex one.

These six profiles of Table 4 are ordered such that level $1 \prec 2 \prec 3 \prec 4 \prec 5 \prec 6$ or Societal Stereotype $\prec$ Societal Norm $\prec$ Personal Moral Evaluation $\prec$ Personal Hypothetical Action $\prec$ Personal Feeling $\prec$ Personal Action. Guttman (1959, p. 320) states that "according to scale theory, ordering the profiles (our six subscales) also implies a formal ordering of the categories within each facet." The ordering of level $1 \prec 2 \prec 3 \prec 4 \prec 5 \prec 6$ implies formally the following simultaneous orderings: $a_1 \prec a_2$, $b_1 \prec b_2 \ldots . x_1 \prec x_2$.

Guttman suggests a common semantic meaning: a progression from a weak to a strong form of behavior of the subject vis-a-vis the attitude object - in our case the mentally retarded. Examination of Table 3 indicates the rationale of this ordering system.

Facet A - the referent "other" is weaker than "self" in being less personal.
Facet B - "belief" is weaker than "action" in being "passive" rather than "active."
Facet C - referring to the behavior of one's "self" rather than that of "others" is stronger in that it implies personal involvement.

Facet D - "comparative" behavior is weaker than "interactive" behavior since it does not imply social contact; a comparison is more passive than interaction.
Facet E - "symbolic" behavior is weaker than "operational" in that it does not imply acting out behavior.

The above analysis is restricted to the ordering implied in the five facets of Table 3 - what Guttman is now calling joint struction. However, an additional question can be asked - Is it possible to establish an ordering principle so that the item content itself can be structioned or "ordered" with some explicit a priori semantic meaning; i.e. rather than attempting to a postori evolve the meaning by some procedure such as factor analysis?

Rokeach (1968) has independently developed and made explicit the idea implied in the Jordan-Guttman paradigm of Figure 2 - the facet "y" of

"condition" in Figure 2 is equivalent to Rokeach's "situation;" one could also argue that the entire lateral dimension of Figure 2 (facets F-J) is equivalent to Rokeach's "object specificity."

The rationale used in the selection of the item content of the ABS-MR attempted to "order" the item content via three principles:

1. Ego involvement: Cognitive-affective. Is the "attitude object in situation y" dealt with cognitively or affectively?

2. Social distance: distant-close. Is the "attitude object in situation y" distant or close to one's self?

3. Relevance: low-high. Is situation y important to the subject?

Consistent with the above discussion of the weak-strong principle implied in Table 3; a positive or stronger attitude would be expressed by a subject who "agreed with or chose" items that dealt with the mentally retarded in "highly important situations that involved the self in close interpersonal action."

FACET THEORY DATA ANALYSIS

Two types of data analysis are indicated: (a) an analysis of the facets across the six levels, i.e., was the simplex obtained and (b) an analysis of the scalar nature of the content within each of the six subscales. The first analysis deals with the joint dimension and the second with the lateral dimension (Jordan, 1968). Table 8 contains the simplex data for the three test development samples, Table 9 contains additional data on the meaning of simplex analysis and Appendix A.5 contains the simplex results on the other samples.

Joint Analysis

Joint struction refers to the difference between subscales or levels, on facets A through E of Figures 1-3. Six additional facets - F through K - were added to differentiate item content within levels. These

Table 8

Analysis of Simplex Correlations[a] of the ABS-MR Test Development Data for the ED 200, Belize, and SER Samples[b]

Descriptive Term		ED 200 - 633 sample[c] 1 2 3 4 5 6		Belize - 523 sample[d] 1 2 3 4 5 6		SER - 88 sample[e] 1 2 3 4 5 6	
		Original Q^2 = .946		Original Q^2 = .858		Original Q^2 = .974	
Societal Stereotype	1	--	matrix	--	matrix	--	matrix
Societal Norm	2	44 --	8.1	22 --	8.3	56 --	8.5
Personal Moral Evaluation	3	05 21 --		11 32 --		17 34 --	
Personal Hypothet. Action	4	15 21 55 --		21 28 39 --		10 12 48 --	
Personal Feeling	5	17 12 19 38 --		17 06 19 31 --		04 13 08 24 --	
Personal Action	6	01 04 05 19 22 --		13 10 15 32 16 --		01 05 04 13 21 --	
		Best Q^2 = .946		Best Q^2 = .859		Best Q^2 = .974	
	1	--	matrix	--	matrix	--	matrix
Examine each matrix for	2	44 --	8.2	22 --	8.4	56 --	8.6
	3	05 21 --		11 32 --		17 34 --	
"order" of levels	4	15 21 55 --		21 28 39 --		10 12 48 --	
	5	17 12 19 38 --		13 10 15 32 --		04 13 08 24 --	
	6	01 04 05 19 22 --		17 06 19 31 16 --		01 05 04 13 21 --	

[a]Reversals are underlined.

[b]See text for sample description.

[c]Critical value or r at .05 level = .08

[d]Critical value of r at .05 level = .09

[e]Critical value of r at .05 level = .18

Table 9

Analysis of Theoretical Correlations[a] of "Perfectly Ordered" Matrices With Equal and Unequal Differences Between Correlations

Descriptive Term		Unequal Differences		Equal Differences		Equal Differences	
Matrices are "Scrambled"	Scrambled	Original Q^2 = .40 -- matrix 98 -- 9.1 20 55 -- 87 63 07 -- 13 37 93 02 -- 47 80 99 28 72 --	Scrambled	Original Q^2 = .561 -- matrix 90 -- 9.3 70 80 -- 90 80 60 -- 60 70 90 50 -- 80 90 90 70 80 --	Scrambled	Original Q^2 = .686 -- matrix 60--- 9.5 40 50 -- 60 50 40 -- 30 40 60 20 -- 50 60 60 30 50 --
Matrices are "Ordered"	1	Best Q^2 = .868 -- matrix	1	Best Q^2 = .994 -- matrix	1	Best Q^2 = .968 -- matrix
	2	87 -- 9.2	2	90 -- 9.4	2	60 -- 9.6
	3	63 98 --	3	80 90 --	3	50 60 --
	4	28 47 80 --	4	70 80 90 --	4	30 50 60 --
	5	07 20 55 99 --	5	60 70 80 90 --	5	40 40 50 60 --
	6	02 13 37 72 93 --	6	50 60 70 80 90 --	6	20 30 40 50 60 --
Levels		1 2 3 4 5 6		1 2 3 4 5 6		1 2 3 4 5 6

[a]Reversals of order are underlined.

additional facets denote attitude item content and are labeled lateral struction. The complete mapping sentence for the family of scales constructed, or to be constructed, on this a priori basis is given in Figure 2. The attitude object of interest, in this monograph, the mentally retarded, is simply substituted in Figure 2. Thus, every item on every level of the ABS-MR scale corresponds to a combination of elements of each and every facet A through K of Figure 2. The ordering system for lateral struction, however, has not been developed as fully as has the system for joint struction.

The results from the SER graduate students (Table 8) form an approximate simplex as predicted from Tables 4 and 22. Contiguity theory also states that the correlations between the six levels should decrease in relation to the numbers of steps that two levels are removed from each other. Examination of Table 8 indicates this to be as predicted: the correlations are in the predicted order (Column 1) for the SER sample; the ED 200 sample has two exceptions; and the Belize sample has one exception. It is also interesting to note that the correlations between Levels 3 and 4 for the SER sample was .48 whereas it was only .34 between Levels 2 and 3. Apparently the SER students saw a closer relationship between how others should behave and their own likely behavior than they did with regard to how others should behave and how they themselves actually do behave toward the retarded.

Kaiser (1962, p. 155) suggests a procedure for testing a simplex approximation: "for scaling the variables of a Guttman simplex..... the procedure.....orders the variables. A measure of the goodness of fit of the scale to the data is suggested."

Kaiser's approach may be seen as performing two functions: (a) a "sorting" of virtually all possible adjacent pairs of matrix entrees so

as to generate the "best" empirically possible simplex approximation; and (b) an assignment of a descriptive statistic, $\underline{Q}^2$, to specified matrices. The index $\underline{Q}^2$ is a descriptive one, with a range of 0.00 to 1.00.

A computer program was developed which (a) re-ordered the adjacent pairs of level members of each matrix, by Kaiser's procedures, so as to generate the best empirically possible simplex approximation; and (b) calculated $\underline{Q}^2$ for the hypothesized ordering and for the empirically best ordering of each matrix.

At the time of the research completion, appropriate likelihood ratios for measuring goodness of fit were not available. Mukherjee (1966) suggests a method which appears appropriate for matrices of equally spaced correlations, but neither our theory not the actual data suggest that the matrices in the present study have equally spaced entries. Harrelson (1969) discusses the $\underline{Q}^2$ method in detail.

The $\underline{Q}^2$ values for the ED200 sample (Table 8, matrix 8.1 & 8.2) were the same (.94) for the hypothesized order and the best order; i.e., the best order for the empirical data of the simplex was the order set forth in the six-level theory of Table 4.

The $\underline{Q}^2$ values for the Belize sample (Table 8, matrix 8.3 & 8.4) were: (a) hypothesized order: .858; and (b) best order: .859. Examination of Table 8 indicates Levels 5 and 6 are reversed in the "best" order of the Belize data but that the increase in the $\underline{Q}^2$ value was minimal.

The Q^2 values for the SER sample (Table 8, matrix 8.5 & 8.6) were the same (.97) for the hypothesized and the best order; as it was for the ED 200 sample.

While there presently is no significance test available for the values of the $\underline{Q}^2$ test, examination of Tables 8 and 9 gives some cues to the relationships between the absolute value of $\underline{Q}^2$ and: (a) the

"ordering" within the simplex matrix, (b) the equal-or-unequal nature of the differences between the correlations, and (c) the absolute size of the correlations.

As indicated in Table 9 (matrix 9.4) the highest $\underline{Q}^2$ value is for an ordered matrix containing both equal-interval and largest correlation values. Table 8 contains the $\underline{Q}^2$ values for the three test development samples for the ABS-MR. The ED 200 sample contains four reversals (matrix 8.1) and the $\underline{Q}^2$ is the same for the obtained simplex and a "best" one obtained by the $\underline{Q}^2$ procedure (Matrix 8.1 & 8.2). In Hamersma's (1969) study "six-reversals" were accepted as the maximum possible for a 6 x 6 data matrix to contain and still be accepted as "approximating" a simplex. By the "six-reversal" criteria a $\underline{Q}^2$ value of .60 would appear minimal and preferably a value of .70 for a 6 x 6 matrix to be acceptable as a simplex.

The simplex results of Table 8 and those in Appendix A.5 lend support to an hypothesis of a cross-cultural and invariate structure between the attitude-behavior scale levels of the ABS-MR. The data also suggest that age and experience bring congruence between what one expects of others and one's self; e.g., the difference in correlation between Levels 3 and 4 as opposed to that between Levels 2 and 3 was much greater for the regular ED 200 education students (Table 8) than for the graduate SER students. The latter are older and have more experience than the former. Both, however, saw themselves hypothetically as doing what was "right" more than they saw others doing so.

The difference between Levels 3 and 4 as opposed to Levels 2 and 3 was less in Belize although in the same direction. The entire simplex in Belize is more restricted and homogeneous, which is what is expected in underdeveloped societies since such societies are less differentiated

(Foa, 1965). It should also be noted that Level 3, the Personal Moral Evaluation level, was involved in many of the instances in which the simplex ordering was not maintained. Apparently the implications of Level 3 are more subtle and difficult to differentiate. Level 3 (Table 17) also has more permutations or level members, and thus finer gradations of meaning, which may make it difficult for respondents to differentiate between the levels.

Lateral Analysis

Multiple Scalogram Analysis[1] (MSA-I) of the data within subscale levels agreed essentially with the semantic content postulated by the facet theory of Figures 1 and 2. Facet theory, in conjunction with the newer multidimensional (non-metric) Guttman-Lingoes computer program (Bloombaum, 1968; Lingoes, 1966), allows one to examine the profiles of individual subjects or groups of subjects who have the same profile.

Most of the previous methods of analysis accounted for the individual subject only indirectly via the correlation matrix. The newer multidimensional scalogram programs by Guttman and Lingoes represents the subjects as points, variables as partitions, and categories of the variables as regions of partitions (Guttman and Schlesinger, 1967, p. 46)

The space diagram (See Bloombaum, 1968, and Jordan, 1968, for examples) generated by the MSA-I analysis must be interpreted, and for this an a priori facet theory of content is useful and/or necessary. However, even when there is no a priori theory of content, the MSA-I can be used empirically to ascertain structure and perhaps suggest hypotheses for theory construction and/or testing. Tables 3 and 4 depict the facets and elements

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[1]It is planned to do a full analysis by Guttman non-metric methods in the forthcoming book. See page ii.

used in arriving at our six "levels" of attitude. Two continua run through the structure: verbal-to-action (cognitive-to-affective) and other-to-self. Level 1 represents the verbal-other pole and Level 6 the action-self pole.

CONVENTIONAL SCALE ANALYSIS

Reliability

Since the Guttman non-metric approach to attitude scale content analysis is relatively new, standard procedures of item analysis and validity assessment were also employed in the development of the ABS-MR.

Item analysis indicated that the items worked fairly well in terms of inter-item correlational patterns and item-to-subscale correlations. The item-to-subscale correlations for the test development data are contained in Tables 11 and 12. Reliability estimates for Levels 1-6 were obtained by a variation of the Hoyt (1941, p. 153-160) method described by Winer (1962). This method used analysis of variance to produce a reliability coefficient equivalent to the Kuder-Richardson measure of interval consistency. The results are contained in Table 10. By usual psychometric standards the ABS-MR can be regarded as reliable. In fact, the reliabilities reported in Table 10 compare favorably to those of many tests used for individual diagnosis, evaluation, and selection described by Anastasi (1961).

Inspection of Table 11 enables one to analyze the relationships of the individual items within each subscale to the total score of that subscale, and inspection of Table 12 indicates the degree of effectiveness of an item across the three samples: The closer the three correlations are on a specific item for a designated subscale the better that item is judged to work "cross-culturally."

Table 10

Reliability Figures for the Test Development Samples

Level	Research Sample		
	ED 200	Belize	SER
1	.73	.63	.74
2	.83	.75	.82
3	.69	.60	.64
4	.79	.79	.79
5	.71	.76	.85
6	.67	.76	.78

Validity

Content validity may be assumed since the content of the items was evolved in cooperation with practicing school psychologists (Figure 1) in the field of mental retardation. Facet theory also guided the selection of items and thus insured that the item universe was sampled.

Construct validity: Inspection of Table 12 indicates adequate similarity between most of the three sets of correlations for the ABS-MR test development data. Tables 8 and 9 also contain supportative construct validity data, since the postulated semantic structure (i.e., Table 4) and the obtained statistical structure (i.e., the simplex) essentially agree. These data can be regarded as evidence of construct validity and an accolade for facet theory. The scale level "ordering" of $1 \lesssim 2 \lesssim 3 \gtrsim 4 \gtrsim 5 \gtrsim 6$ in several nations is further evidence of construct validity and cross-cultural invariance.

Concurrent validity may be inferred from the fact that the older, more experienced, and more knowledgable test development sample (the SER) also scored more positively toward the mentally retarded. Data were gathered for the three test development samples on 22 predictor variables (Numbers 15-36, Table 13) which offer considerable "correlational" evidence of the validity of the ABS-MR content in that groups with known characteristics responded as expected. Additional data on other groups are contained in Appendix A.5.

Table 11

Item to Subscale Correlations for Three Samples
for the ABS-MR: Arranged by Sample

Item[d]	SER Sample[a]						ED. 200 Sample[b]						Belize Sample[c]					
	S U B S C A L E S o r L E V E L S																	
	I	II	III	IV	V	VI	I	II	III	IV	V	VI	I	II	III	IV	V	VI
1	41	63	46	38	43	64	30	61	41	49	53	44	23	58	53	53	31	56
2	16	61	41	57	53	74	14	65	48	53	48	49	45	61	50	62	42	56
3	27	65	44	45	60	43	32	57	43	58	55	43	41	58	43	56	54	45
4	32	64	33	51	58	43	37	69	48	52	57	45	16	56	54	52	41	50
5	55	61	42	52	44	00	31	57	29	65	48	37	41	52	21	56	47	45
6	24	62	54	49	53	54	35	64	42	59	56	49	17	58	31	59	45	55
7	43	30	51	54	74	51	50	24	44	65	66	47	34	13	31	61	44	45
8	51	47	29	71	61	56	50	49	30	55	53	40	53	52	15	61	37	55
9	60	57	39	66	74	46	56	37	40	57	63	37	51	48	27	60	47	42
10	62	68	33	63	59	--	54	66	36	52	51	37	51	46	20	55	48	36
11	51	22	54	51	55	10	55	38	51	47	42	36	38	41	50	48	47	39
12	34	29	43	60	72	--	24	47	50	57	56	33	47	33	45	53	50	38
13	43	30	47	61	64	17	44	46	51	50	18	30	31	31	52	42	49	-19
14	48	50	47	60	73	68	49	54	46	52	41	28	41	47	41	50	55	47
15	41	39	23	37	74	55	50	34	24	56	46	36	29	29	30	57	53	39
16	51	50	17	55	64	37	41	50	29	54	20	33	42	48	21	46	39	36
17	--	34	18	-26	59	37	23	36	27	-14	43	46	38	31	15	07	44	54
18	40	57	34	-19	-46	42	44	48	33	-24	-06	32	29	32	28	12	52	41
19	50	38	39	-09	-47	14	38	39	37	28	36	40	17	24	30	15	47	36
20	50	27	15	16	51	52	40	19	06	23	-02	48	18	03	07	22	44	42

[a]M.S.U. graduate students. December 1967, N=88
[b]M.S.U. sophomore education students. January 1968, N=633
[c]Belize primary teachers. January 1968 N=523
[d]Listed serially. See instrument for actual item numbers.

Table 12

Item to Subscale Correlations for Three Samples for the ABS-MR: Arranged by Subscale or Level

Item[d]	SAMPLE and SUBSCALES or LEVELS																	
	I			II			III			IV			V			VI		
	S[a]	E[b]	B[c]	S	E	B	S	E	B	S	E	B	S	E	B	S	E	B
1	41	30	23	63	61	58	46	41	53	38	49	53	43	53	53	64	44	56
2	16	14	45	61	65	45	41	48	50	57	53	62	53	48	42	74	49	56
3	27	32	41	65	57	58	45	53	43	45	58	56	60	55	54	43	43	45
4	32	37	16	64	69	56	33	48	54	51	52	52	58	57	41	43	45	50
5	53	31	41	61	57	52	42	29	21	52	65	56	44	48	47	00	37	45
6	24	35	17	62	64	58	54	42	31	49	59	59	53	56	45	54	49	55
7	43	50	34	30	24	13	51	44	31	54	65	61	74	66	44	51	47	45
8	51	50	53	47	49	52	29	30	15	71	55	61	61	53	37	56	40	55
9	60	56	51	57	37	48	39	40	27	66	57	60	74	63	47	46	37	42
10	62	54	51	68	66	46	33	36	20	63	52	55	59	51	48	--	37	36
11	51	55	38	22	38	41	54	51	50	51	47	48	55	42	47	10	36	39
12	34	24	47	29	47	33	43	50	45	60	57	53	72	56	50	--	33	38
13	43	44	31	30	46	31	47	51	52	61	50	42	64	18	49	17	30	-19
14	48	49	41	50	54	47	47	46	41	60	52	50	73	41	55	68	28	47
15	41	50	29	39	34	29	23	24	30	37	56	58	74	46	53	55	36	39
16	51	41	42	50	50	48	17	29	21	55	54	46	64	20	39	37	33	36
17	--	23	38	34	36	31	18	27	15	-26	-14	07	59	43	44	37	46	54
18	40	44	29	57	48	32	34	33	28	-19	-24	28	-46	-06	52	42	32	41
19	50	38	17	38	39	24	39	37	30	09	28	15	-47	36	47	14	40	36
20	50	40	18	27	19	03	15	06	07	16	23	22	51	-02	44	52	48	42

[a] M.S.U. graduate students. December 1967, N=88.
[b] M.S.U. sophomore education students. January 1968, N=633.
[c] Belize premary teachers. January 1968, N=523.
[d] Listed serially. See instrument for actual item numbers.

TABLE 13

SAMPLE SIZES, MEANS, ADJUSTED MEANS, AND SIGNIFICANCE TEST RESULTS FOR THE ABS-MR[1] DATA FOR THE ED 200[2], SER[3], AND BELIZE[4] SAMPLES

	VARIABLE	ED 200 = E			SER = S			BELIZE = B			FEMALE = F			MALE = M			F	Sig[5] Of F	Multiple Means Test[7] $p < .05$
		N	Mean	Adj $\bar{X}$	N	Mean	Adj $\bar{X}$	N	Mean	Adj $\bar{X}$	N	Mean	Adj $\bar{X}$	N	Mean	Adj $\bar{X}$			
Attitude Content	1. Stereo	633	32.79	32.79	88	30.89	30.87	523	35.57	35.57	846	33.90	33.80	398	33.66	33.88	34.90	<.0005	E > S, B > E, B > S
	2. Norm	633	35.63	35.63	88	36.00	35.94	523	40.91	40.93	846	37.88	37.76	398	37.86	38.13	99.02	<.0005	B > E, B > S
	3. Moral	633	44.48	44.48	88	46.09	46.04	523	45.56	45.57	846	44.95	44.94	398	45.27	45.28	5.66	.001	S > E, B > E
	4. Hypo	633	42.76	42.75	88	45.38	45.27	523	41.98	42.01	846	42.35	42.41	398	43.20	43.07	8.50	<.0005	S > E, E > B, S > B
	5. Feel	633	39.80	39.80	88	39.13	39.03	523	39.94	39.96	846	39.64	39.62	398	40.18	40.21	1.38	.745	----------
	6. Action	633	27.33	27.32	88	32.80	32.53	523	31.02	31.09	846	28.74	28.73	398	30.40	30.42	69.45	<.0005	M > F, S > E, B > E, S > B
	7. Total	633	222.79	222.75	88	230.27	229.68	523	234.99	235.14	846	227.45	227.25	398	230.57	230.99	37.62	<.0005	M > F, S > E, B > S
Attitude Intensity	8. Stereo	633	40.71	40.70	88	43.44	43.23	523	46.38	46.44	846	42.96	42.85	398	43.98	44.20	74.09	<.0005	M > F, S > E, B > E, B > S
	9. Norm	633	40.71	40.69	88	42.19	41.94	523	44.47	44.54	846	41.95	41.87	398	43.34	43.51	27.23	<.0005	M > F, B > E, B > S
	10. Moral	633	45.19	45.18	88	49.20	48.99	523	46.33	46.38	846	45.48	45.51	398	46.95	46.89	10.57	<.0005	M > F, S > E, B > E, S > B
	11. Hypo	633	45.97	45.96	88	51.27	51.25	523	48.38	48.39	846	47.29	47.31	398	47.51	47.45	17.84	<.0005	S > E, B > E, S > B
	12. Feel	633	45.82	45.81	88	50.44	50.29	523	47.78	47.32	846	46.42	46.45	398	47.50	47.42	10.20	<.0005	M > F, S > E, B > E, S > B
	13. Action	633	46.00	45.97	88	38.22	37.89	523	33.48	33.57	846	39.33	39.51	398	41.99	41.61	217.31	<.0005	M > F, E > S, E > B, S > B
	14. Tot.	633	264.39	266.30	88	276.77	273.58	523	266.33	266.64	846	263.43	263.52	398	271.28	272.09	7.75	<.0005	M > F, S > E, S > B
Value	15. Efficacy Cont.	633	22.86	22.85	88	23.15	23.04	523	24.46	24.49	845	23.37	23.33	398	23.94	24.02	30.09	<.0005	M > F, B > E, B > S
	16. Efficacy Int.	633	27.50	27.49	88	27.28	27.12	523	28.52	28.56	845	27.61	27.58	398	28.55	28.62	11.87	<.0005	M > F, B > E, B > S
Know.	17. MR Knowledge	616	2.73	2.73	86	3.36	3.38	508	2.59	2.58	824	2.78	2.79	386	2.58	2.55	16.11	<.0005	F > M, S > E, B > E, S > B
Content	18. HP Amount	622	2.46	2.46	88	3.59	3.57	493	2.65	2.66	813	2.67	2.69	390	2.68	2.65	19.48	<.0005	S > E, S > B
	19. HP Avoid	622	3.69	3.69	88	3.25	3.21	490	2.57	2.58	811	3.09	3.11	389	3.43	3.40	44.37	<.0005	M > F, E > S, E > B, S > B
	20. HP Income	354	1.37	1.37	61	4.08	4.08	208	1.62	1.62	399	1.65	1.72	224	1.86	1.72	114.09	<.0005	S > E, B > E, S > B
	21. HP Alter	582	1.63	1.63	75	4.08	4.05	444	1.73	1.73	733	1.74	1.78	368	2.02	1.94	76.46	<.0005	S > E, S > B
	22. MR Amount	619	1.85	1.85	87	2.97	2.95	468	2.26	2.26	788	2.04	2.06	386	2.20	1.94	25.56	<.0005	S > E, B > E, S > B
	23. MR Enjoy	622	3.15	3.15	87	4.14	4.13	494	3.34	3.34	817	3.27	3.29	386	3.36	3.36	15.32	<.0005	S > E, B > E, S > B
Demographic	24. Age	632	1.41	1.41	88	2.35	2.33	517	1.95	1.96	844	1.65	1.65	393	1.82	1.82	71.54	<.0005	M > F, S > E, B > E, S > B
	25. ED Amount	632	4.01	4.01	88	4.82	4.81	492	3.09	3.09	819	3.65	3.69	393	3.79	3.72	292.75	<.0005	S > E, E > B, S > B
	26. Rel-Import.	630	3.68	3.69	88	3.89	3.94	520	4.66	4.64	843	4.24	4.22	395	3.82	3.86	116.93	<.0005	F > M, S > E, B > E, B > S
	27. Rel-Adher.	629	3.50	3.50	88	3.75	3.79	520	3.95	3.94	841	3.79	3.78	396	3.52	3.53	17.90	<.0005	F > M, S > E, B > E
Change Orientation	28. Self Change	632	2.48	2.38	88	2.65	2.66	520	2.42	2.42	843	2.49	2.49	397	2.43	2.42	2.56	.05	B > S
	29. Child Rear	631	2.98	2.98	88	2.93	2.93	520	3.54	3.54	842	3.21	3.19	397	3.70	3.23	62.10	<.0005	B > E, B > S
	30. Birth Control	630	3.46	3.46	88	3.57	3.58	519	2.60	2.60	840	3.11	3.13	397	3.10	3.06	139.36	<.0005	F > M, E > B, S > B
	31. Automation	632	3.18	3.18	88	3.33	3.31	516	3.40	3.40	839	3.25	3.25	397	3.34	3.35	9.88	<.0005	M > F, B > E
	32. Pol Leaders	630	2.13	2.13	88	2.33	2.32	517	2.46	2.46	839	2.28	2.27	396	2.29	2.30	9.37	<.0005	B > E
	33. Rule Adherence	628	2.80	2.79	88	2.99	2.97	520	2.46	2.47	840	2.62	2.64	396	2.77	2.74	16.84	<.0005	E > B, S > B
Education	34. Local Aid	627	3.03	3.02	88	3.15	3.14	519	2.96	2.96	839	2.99	3.00	395	3.04	3.03	1.47	.22	----------
	35. Fed Aid	628	2.95	2.95	88	2.97	2.96	514	2.86	2.86	834	2.90	2.90	396	2.95	2.95	1.38	.24	----------
	36. ED Plan	624	3.19	3.19	88	3.09	3.09	503	2.97	2.97	823	3.09	3.09	392	3.09	3.09	5.56	.001	B > S

[1] ABS-MR = Attitude Behavior Scale: Mental Retardation.

[2] N.S.U. graduate students in special education and rehabilitation, September, 1967.

[3] N.S.U. sophmore education majors, January, 1968.

[4] Belize (British Honduras) school teachers, January, 1968.

[5] Controls for sample size and sex ratio within samples.

[6] Holding constant sex.

[7] Roughly equivalent to Duncan's Multiple Means Test up to three means. Somewhat more liberal after three means, increasing probability to Type I error.

Chapter 3

FACET THEORY AND THE ABS-MR

The rationale for the development of the ABS-MR is contained in facet theory. The multiplication of facets ABCDE in Table 3 yields 32 combinations of elements. Maierle (1969) has shown in detail that not all combinations are logical because of semantic considerations. Tables 14 and 15 contain Maierle's complete listing of all such permutations. Following the original notation of Guttman (1959), weak elements have been assigned the subscript "1" and strong elements have been assigned the subscript "2" so that for example, the permutation 1 - 1 - 1 - 1 - 2 is that permutation having all wak elements except the final one. The particular order in which the permutations have been written in Table 14 was chosen to correspond to the ordering of facets proposed in Table 3, although the explanations which follow are not dependent upon that ordering.

Profile Derivation Procedures

At the time of construction of the ABS-MR scale, the element names "others" and "self" were used; however, the difference in element names does not directly affect the theory underlying the ABS-MR. If in place of the subscripts "1" and "2" are written letters to represent the element names (e.g., O=others, B=believe, I=interact, P=operational) then Table 14 would appear as Table 15. Such an assignment of element names makes possible the "definitional statements" listed in Table 17.

Each of the 32 permutations listed in Table 15 can thus be assigned a "definitional statement," or expression in sentence form of the particular set of elements involved in that permutation. Thus "o-b-o-c-s-" may be read "Others believe others compare symbolically."

Table 14

Permutations of Five Two-element Facets[1]

Permutations	Facets and Subscripts				
	A	B	C	D	E
1	1	1	1	1	1
2	1	1	1	2	1
3	2	1	1	1	1
4	2	1	1	2	1
5	1	1	2	1	1
6	1	1	2	2	1
7	2	1	2	1	1
8	2	1	2	2	1
9	1	2	1	1	1
10	1	2	1	2	1
11	2	2	1	1	1
12	2	2	1	2	1
13	1	2	2	1	1
14	1	2	2	2	1
15	2	2	2	1	1
16	2	2	2	2	1
17	1	1	1	1	2
18	1	1	1	2	2
19	2	1	1	1	2
20	2	1	1	2	2
21	1	1	2	1	2
22	1	1	2	2	2
23	2	1	2	1	2
24	2	1	2	2	2
25	1	2	1	1	2
26	1	2	1	2	2
27	2	2	1	1	2
28	2	2	1	2	2
29	1	2	2	1	2
30	1	2	2	2	2
31	2	2	2	1	2
32	2	2	2	2	2

[1]Subscript "1" indicates weak element; "2" indicates strong element.

Table 15

Permutations of Five Two-element Facets[a] and Basis of Elimination

Permutations			Facets and Subscripts					Basis of Elimination[c]
No.[b]	In Table 17	In Table 4	A	B	C	D	E	
1	1	Level 1	o	b	o	c	s	
2	2	Level 2	o	b	o	i	s	
3	3	--	i	b	o	c	s	
4	4	Level 3	i	b	o	i	s	
5	5	--	o	b	i	c	s	
6	6	--	o	b	i	i	s	
7	7	--	i	b	i	c	s	
8	8	Level 4	i	b	i	i	s	
9	--	--	o	a	o	c	s	
10	9	--	o	a	o	i	s	
11	--	--	i	a	o	c	s	1 2
12	--	--	i	a	o	i	s	1
13	--	--	o	a	i	c	s	1 2
14	--	--	o	a	i	i	s	1
15	--	--	i	a	i	c	s	2
16	10	Level 5	i	a	i	i	s	
17	--	--	o	b	o	c	p	2 3 4
18	--	--	o	b	o	i	p	4
19	--	--	i	b	o	c	p	3 4
20	--	--	i	b	o	i	p	4
21	--	--	o	b	i	c	p	3 4
22	--	--	o	b	i	i	p	4
23	--	--	i	b	i	c	p	3 4
24	--	--	i	b	i	i	p	4
25	--	--	o	a	o	c	p	2 3
26	11	--	o	a	o	i	p	
27	--	--	i	a	o	c	p	1 2 3 4
28	--	--	i	a	o	i	p	1
29	--	--	o	a	i	c	p	1 2 3
30	--	--	o	a	i	i	p	1
31	--	--	i	a	i	c	p	2 3
32	12	Level 6	i	a	i	i	p	

[a]See Table 3 for facets.

[b]Numbering arbitrary, for identification only.

[c]Logical semantic analysis as follows:
Basis 1: an "a" in facet B must be preceded and followed by identical elements, both "o" or both "i".
Basis 2: a "c" in facet D cannot be preceded by an "a" in facet B.
Basis 3: a "c" in facet D cannot be followed by a "p" in facet E.
Basis 4: a "p" in facet E cannot be preceded by a "b" in facet B.
See text for explanation.

Table 16

Five-Facet Six-Level System of Attitude Verbalizations: Twelve Hypothesized Level Members[a]

Level[b]					
1	o b o c s				
	a_1 b_1 c_1 d_1 e_1				
2	i **b** o c s	o b o i s	o b i c s		
	a_2 b_1 c_1 d_1 e_1	a_1 b_1 c_1 d_2 e_1	a_1 b_1 c_2 d_1 e_1		
3	i b o i s	i b i c s	o b i i s	o a o i s	
	a_2 b_1 c_1 d_2 e_1	a_2 b_1 c_2 d_1 e_1	a_1 b_1 c_2 d_2 e_1	a_1 b_2 c_1 d_2 e_1	
4	i b i i s	o a o i p			
	a_2 b_1 c_2 d_2 e_1	a_1 b_2 c_1 d_2 e_2			
5	i a i i s				
	a_2 b_2 c_2 d_2 e_1				
6	i a i i p				
	a_2 b_2 c_2 d_2 e_2				

[a] See Table 3 and 17 for identification of letters within boxes; each box contains a symbolic expression of a level-member definitional statement.

[b] All profiles of any one level, following the Guttman and Jordan formulations, have the same number of strong and weak facets.

Table 17

Five-Facet Six Level System of Attitude-Behavior Verbalizations:[a]
Levels, Facet Profiles, and Definitional
Statements for Twelve Permutations

Level	Facet Profile[a]	No[d]	Definitional Statements[b]	Descriptive Name[c]
1	o b o c s $a_1b_1c_1d_1e_1$	0	Others believe others compare symbolically**	** Societal Stereotype (group assigned group status)
2	i b o c s	1	I believe others compare symbolically	Personally-assigned group status
	o b o i s $a_1b_1c_1d_2e_1$		Others believe others interact symbolically**	** Societal Norm
	o b i c s		Others believe I compare symbolically	Group-assigned personal status
3	i b o i s $a_2b_1c_1d_2e_1$	2	I believe others interact symbolically**	** Personal Moral Evaluation (perceived values)
	i b i c s		I believe I compare symbolically	Self-concept (personally-assigned personal status)
	o b i i s		Others believe I interact symbolically	Proclaimed Laws (group expectations)
	o a o i s		(Others act) others interact symbolically	Group identity (actual group feelings)
4	i b i i s $a_2b_1c_2d_2e_1$	3	I believe I interact symbolically**	** Personal ypothetical Action
	o a o i p		(Others act) others interact operationally	Actual group behavior
5	i a i i s $a_2b_2c_2d_2e_1$	4	(I act) I interact symbolically**	** Personal Feeling
6	i a i i p $a_2b_2c_2d_2e_2$	5	(I act) I interact operationally**	** Personal Action

[a]Cf. Tables 14 and 15.

[b]Words in parentheses are part of redundant but consistent statements

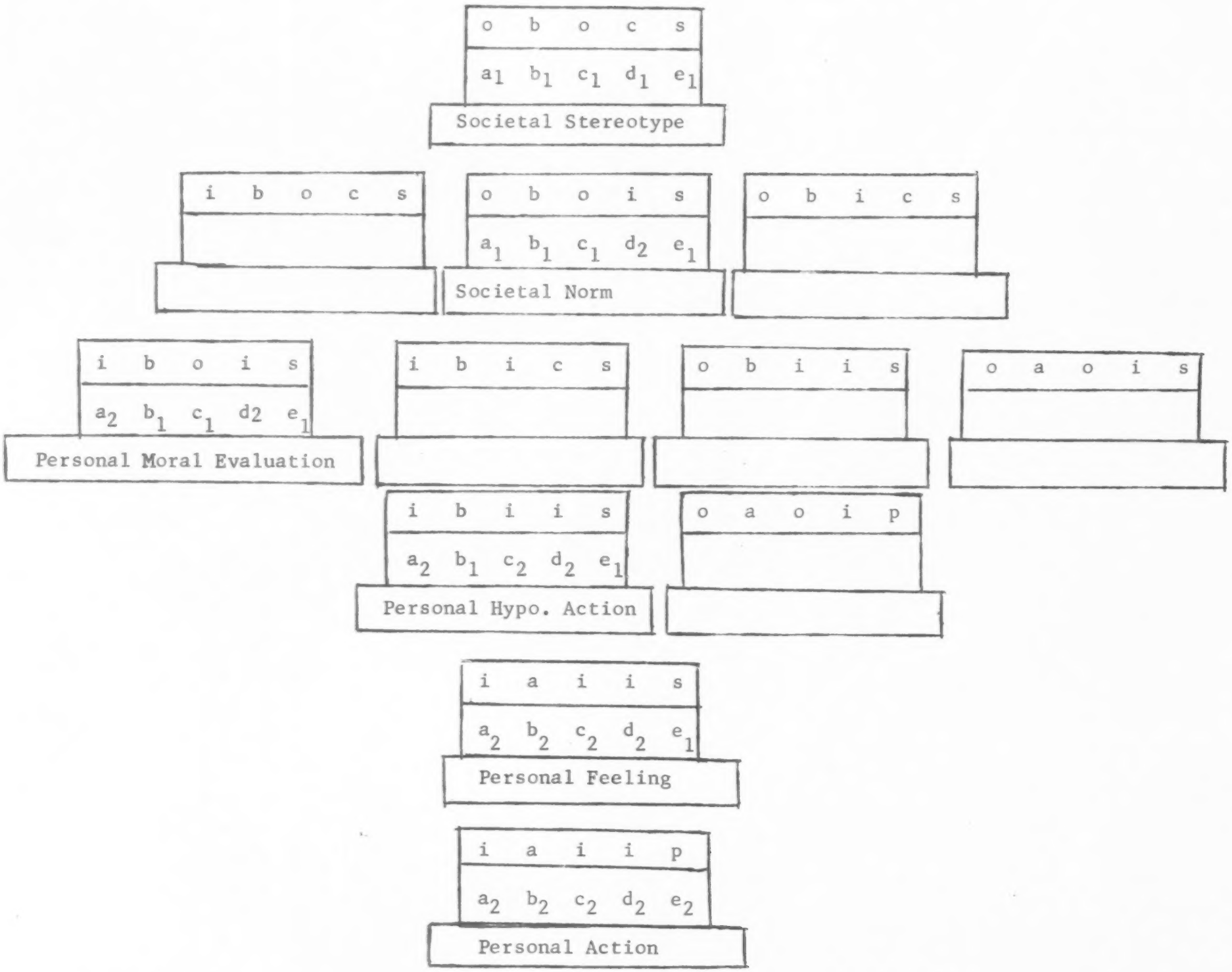
[c]Alternate names in parentheses indicate relationships of various level members.

[d]No. - number of strong elements.

** Permutations used in the ABS-MR.

Table 18

Five-Facet Six-Level System of Attitude Verbalizations: Jordan's Set of Six Permutations[a]



[a]Cf. Table 16 for design for schematization.

For various logical or semantic reasons, however, only 12 of the 32 permutations are possible. When the strong element of facet B is present, items written would be redundant if expressed completely--i.e., "I act I act...." But while a weak element in facet B-viz., "believe"--can be preceded or followed by either "others" or "I", no implication of thinking about behavior is present in the strong element, "act." Basis 1 for the elimination of some permutations, therefore, is expressed "an 'a' in facet B must be preceded and followed by identical elements, both 'o' or both 'i'."

Given the redundance implied by the strong element "act" of facet B, the actor's intergroup behavior (facet D) and the referent's behavior (facet B) must be consistent: they both refer to the same person or persons. If the referent and actor are acting (strong element of facet B), he or they cannot simultaneously be seen simply in comparison (weak element of facet D). Basis 2 for the elimination for some permutations is expressed "a 'c' in facet D cannot be preceded by an 'a' in facet B."

The domain of the actor's behavior (facet E) can be symbolic whether the actor's intergroup behavior is comparative or interactive, but the operational domain applies only to overt acts, so that, as Basis 3 for the elimination of some permutations, "a 'c' in facet D cannot be followed by a 'p' in facet E."

Finally, if the domain of the actor's behavior is operational (strong element of facet D), then the expression of belief (weak element of facet B) would seem inconsistent--i.e., the presumption would be that although the individual or group actually performs some intergroup action overtly (operationally), they only believe they so act and do not actually act (weak element, "belief," of facet B). Provision is made for the situation

in which an individual is not certain whether a particular item--of whatever level--applies: such provision is made in the answer foil "uncertain." Note, however, that such uncertainty does not imply the concurrent action and unawareness of action which would be implied by the combination of a weak element, belief, in facet B, and a strong element, operationally, in facet E. The Basis 4 for the elimination of some permutations, therefore, may be expressed "a 'p' in facet E cannot be preceded by a 'b' in facet B."

The final column in Table 15 indicates in summary fashion which of the bases for elimination of permutations apply to which permutations. Twelve permutations remain semantically possible. Maierle extended the analysis (Tables 19-26) of the twelve permutations to show the relationships between all permutations and the six levels used in Table 4 in construction of the ABS-MR.

Sets of Permutations

Tables A.19-26 indicate the sets of permutations which fit the restrictions on "semantic paths." The tables depict the semantic profiles in several ways: (a) in the order suggested by the definitional statements (a - b - c - d - e) and (b) in the order in which facets are changed from weak to strong for that particular semantic path. The tables also indicate the level member name for each permutation included in the semantic path.

Definitional statements facilitate writing of appropriate attitude items for each level member as described above; on the other hand, listing the facets in the order in which they change within a particular set of element permutations or semantic path makes possible a clearer graphic representation (i.e., the simplex) of the successive nature of facet changes from weak to strong elements. As indicated above, semantic path "C" (TableA.22) is that set of permutations according to which the ABS-MR

was constructed. Semantic path "C" was chosen for three reasons: (a) psychological rationale and/or usefulness in the six subscales, (b) the simplex order between the six subscales, and (c) they were judged to be potentially capable of instrumentation. Table 4 also presents semantic path "C" in another way: each element in each level member is identified by facet letter and by subscript (1=weak, 2=strong); the successive nature of facet changes within the set of six types of attitude struction is again indicated.

In summary, the six levels or subscales of the ABS-MR were constructed to correspond to the facet design depicted in Tables 4 and A.22 and Figures 1 and 2. The six level structure or joint dimension was determined by Tables 4 and A.22, whereas the item content or lateral dimension was structured by Figures 1 and 2.

Intensity

Guttman and Foa (1951) have emphasized the importance of intensity measures in attitude scales, particularly with regard to the contact variable.

> A single question ordinarily cannot distinguish between changes due to intensity and those due to direction. A change in response to a single question may be due to either factor, or to both. Since any single question is usually biased, as is easily seen from the theory of scale and intensity analysis, the use of a single question for the study of effect, or change, or even for comparing groups is quite inadvisable (p. 53).

Suchman (1950) has suggested that intensity of attitudes may be ascertained by asking a question about intensity immediately following a content question.

> One form used for an intensity question is simply: "How strongly do you feel about this?" with answer categories of "Very strongly" "Fairly strongly," and "Not so strongly." Repeating such a question yields a series of intensity answers. Using the same procedure as for content questions, these are scored and each respondent is given an intensity score (p. 219).

This latter procedure was adopted to measure intensity of attitudes on the ABS-MR. On Levels 1-5, the three alternatives "not sure," "fairly sure," and "sure" are presented to the question "How sure are you of this answer?" for each item in these scales. A variation of this procedure was used on Level 6 to ascertain whether a reported experience with the retarded was "unpleasant," "in between," or "pleasant."

The alternatives to each content question (lateral dimension) are ordered in such a manner that the highest number reflects the most positive favorable, or "overfavorable" attitude.

THE ATTITUDE-BEHAVIOR SCALES

The ABS-MR is the first of a family of scales being developed under the direction of Jordan (1968) using the model presented in Table 4.

Other ABS's currently available are as follows:

1. ABS-BW/WN. . . . . Blacks toward Whites and Whites toward Blacks in seven areas:

   (C) Characteristics (Personal)
   (E) Education
   (H) Housing
   (J) Jobs
   (L) Law and Order
   (P) Political Activism (Racial)
   (W) War and Military
   (G) General (two items from each of above seven)

2. ABS-SAF. . . . . "Africans"/Whites (in South Africa)
   (G) General, minus L, P, and W items of the ABS-BW/WN

3. ABS-MP/PM. . . . . Maoris/Pakehas (in New Zealand)

   (E) Education
   (G) General

4. ABS-MI or EDP. . . Mentally Ill or Emotionally Disturbed Persons

5. ABS-DF . . . . . Deaf

6. ABS-ABE. . . . . Undereducated Adults (Adult Basic Education)

7. ABS-CES . . . . . Black VS White Cooperative Extension Service farm agents.

8. ABS-BL . . . . . Blind

9. ABS-WD . . . . . War Disabled (in Viet Nam)

10. ABS-DU . . . . . Drugs (in process)

An ideal, complete research project, as Guttman (1959) has elsewhere suggested, would consist of observing a value for each subject on each varient of facets F through K for each of the six levels A through E. Guttman (1959) has further suggested that any coherent theory referring to empirical research can be expressed in a similar mapping sentence (Figure 4):

> Lack of theoretical clarity as to the specifications of the facets of the mapping may be the situation that often impedes the connection between abstract theory and empirical work (p. 323).

Clearly the ABS-MR scale falls short of the ideal, complete research project suggested by Guttman. Nevertheless, it represents one of the few such attitude scales constructed on an a priori basis according to Guttman's facet theory.

Scale Development Summary

The facet theory approach to scale construction has been applied herein to the area of attitudes toward mentally retarded persons. It was postulated that attitudes involve not only object-specificity but situation-specificity and object-subject relationships: our attitude object was the mentally retarded, situations included education, personal characteristics, employability, etc., and relationships were specified between the object and the actor; the latter sometimes being "self" and sometimes "others."

Operational paradigms (Table 3 and Figures 1-3) were volved via a Guttman facet theory rationale to enable the specification of object-

Figure 4

A MAPPING SENTENCE[a] FOR STRATEGIES OF THEORY DEVELOPMENT

Investigator (x) uses a strategy for { a_1 receiving; a_2 implementing; a_3 evaluating } ideas for his

construction of a { b_1 definition; b_2 specification; b_3 rationale; b_4 hypothesis } for a construct { c_1 definition; c_2 specification; c_3 rationale; c_4 hypothesis }

of his theory (y) through treatment by { d_1 assertion; d_2 deletion; d_3 substitution; d_4 intension; d_5 extension } of aspect (z) of

{ e_1 conceptual; e_2 empirical } constructs that were constructed by { f_1 others; f_2 himself }

$\longrightarrow$ { g_1 high; g_2 medium; g_3 low } level of strategic formalism.

A Condensation of the Sentence

INVESTIGATOR (x) / uses IDEA STRATEGY (a) / for his CONSTRUCTION OF (b) / for CONSTRUCT (c) / of his THEORY (y) / through TREATMENT (d) / of ASPECT (z) / of CONSTRUCTS (e) / of CONSTRUCTER (f) / $\longrightarrow$ LEVEL (g) of strategic FORMALISM.

An Abstraction of the Sentence

[a] From Guttman (1970).

XABCYDZEF $\longrightarrow$ a_0G

subject relationships (joint dimension) as well as situation content (lateral dimension) in each attitude scale item.

The research had five main substantive questions or purposes:

1. To test the simplex hypothesis concerning the object-subject relationship, i.e., Tables 3, 4, 17, and A.22. Six levels of relationship were selected for research.
2. To select relevant situations around which to specity the six relationships. The situations are specified in facet "D" of Figure 1 or facet "F" of Figure 2.
3. To test the effectiveness of selected variables as predictors of attitudes. Table 6 contains the predictor variables: values, contact, knowledge, demographic, and change proneness. In general attitudes toward mentally retarded persons were highly related to value orientation, knowledge, and contact. The data also indicate, in direct opposition to Zajonc (1968), that "mere exposure" or amount of contact per se is not sufficient to produce favorable attitudes.
4. To ascertain the ability of the ABS-MR to differentiate between groups having different degrees of favorableness of attitudes toward the mentally retarded. Tables 13 and Appendix 5 indicate the ABS-MR does differentiate as postulated.
5. To construct a scale with units that would be equivalent and comparable for cross-cultural research. The simplex for Belize (Table 8, matrix 8.3) and those in Appendix A.5 indicate the object-subject relationship is "ordered" about the same across diverse groups and nations.

The test development data indicate that the five purposes were essentially achieved: (a) that the ABS-MR attitude levels do exhibit a

simplex structure, (b) that relevant object-situations were selected, (c) that selected variables are effective predictors of favorable attitudes, (d) that the ABS-MR can differentiate between groups, and (e) that the ABS-MR is acceptably cross-culturally equivalent and comparable.

It is anticipated that further work with the ABS-MR will lead to a shorter version. Since this may be two or three years in development, the data on the longer edition are presented herein since attitude scales on mental retardation are currently rather inadequate and cross-cultural scales are largely nonexistent.

The theory and procedures presented herein will also still apply to the projected "shorter" edition of the ABS-MR instrument; only the number of items, and perhaps minor editing of some items, will change.

CHAPTER 4

DESIGN AND ANALYSIS PROCEDURES

The purpose of the study was to investigate attitudes of designated groups in different nations toward the mentally retarded. Accordingly, nations were chosen at varying levels of modernization, economic development, and cultural orientation. The design of the international study, therefore, called for samples from the same "interest groups"[1] in different nations. Analysis procedures were chosen which permitted testing the relationships specified in the hypothesis.

SAMPLE

The sample of the study is contained in Table 27. The study was designed to use the following five groups:

1. Teachers of the mentally retarded -- SER
2. Regular school teachers ---------- RST
4. Parents of mentally retarded-------- PMR
5. Employers/Managers--Executives------ MAN
8. Parents of non-retarded---------- PNR

In some nations additional groups were used and in some nations some groups were not obtained for varying reasons. Selection of these five groups, whose attitudes were projected to be important in respect to the education, employment, and well being of the mentally retarded should make the study usefel to practitioners as well as scholars of attitude structure, content, and determinants, and hopefully shed light on attitude change theory.

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[1] "Any group that, on the basis of one or more shared attitudes makes certain claims upon other groups in the society for the establishment, maintenance or enhancement of forms of behavior that are implied by the shared attitude" (Ehrmann, 1958, p. 236).

Table 27

Sample by Nation[a] and Group[b] for the
Cross-cultural Mental Retardation Study[c]

	1[d] BEL	2 BRA	3 COL	4 GER	5 ISR	6 YUG	U. S. 7 KEN	U. S. 8 MIC	U. S. 9 TEX	SPECIAL 10[d] EDU	SPECIAL 11 DIA	SPECIAL 12[d] MED	TOTALS
1-SER	--	31	33	147	74	--	50	--	50	--	--	--	385
2-RST	523	--	402	74	--	--	54	--	48	--	--	--	1,101
4-PMR	--	--	102	144	12	50	--	41	49	--	--	--	398
5-MAN	--	30	--	83	--	--	20	--	--	--	--	--	133
7-STU	--	--	--	--	--	--	--	--	--	633	34	88	754
8-PNR	--	29	--	69	44	49	--	33	76	--	--	--	300
9-PRO	--	--	--	--	23	--	--	--	--	--	--	--	23
TOTALS	523	90	537	517	153	99	124	74	223	633	34	88	3094

[a] 1-BEL - Belize
2-BRA - Brazil
3-COL - Colombia
4-GER - Germany
5-ISR - Israel
6-YUG - Yugoslavia
7-KEN - Kentucky
8-MIC - Michigan
9-TEX - Texas
10-EDU - ED200 Students
11-DIA - Diagnosticians-school
12-MED - ED 429 Students

[b] 1-SER - Special ed./rehabil.
2-RST - Regular school teachers
4-PMR - Parents of ment. retarded
5-MAN - Managers
7-STU - Students
8-PNR - Parents of non-retarded
9-PRO - Professionals

[c] Iran in process but not complete.

[d] Sample 1, 10, and 12 were the test development samples.

ANALYSIS PROCEDURES

The Control Data Corporation computer (CDC 3600 and 6500) at Michigan State University was used to analyze the data. Table 28 contains the variable list of the study by IBM card and column.

Descriptive Statistics

Two frequency column count programs (Clark, 1964) designated as FCC-I and FCC-II were used. These programs were used to compile the frequency distributions for every item of the instruments. This procedure is often useful for selecting additional variables for analysis and for gaining a clinical "feel" for the data.

Correlational Statistics

In the CDC MD-STAT program (Ruble & Rafter, 1966), a great amount of data can be employed in one analysis. Separate analysis can be done for the total group and for any number of sub-groups or partitionings of the data. For each specified group. e.g., total, male, female, etc,. a number of statistics can be requested. Those used for each partitioning in this research were means and standard deviations for each variable and the matrix of simple correlations between all variables.

Partial and multiple correlations are also outputs of the general multiple regression model used in the CDC program at MSU (Ruble, Kiel & Rafter, 1966a). One advantage to the use of partial correlation is that a number of variables which are assumed to have some relationsjip to a criterion, or dependent variable, can be examined simultaneously. Often when a series of Pearsonian product-moment r's are computed between a criterion and a set of variables considered to be predictors of the criterion it is possible to obtain spuriously based conclusions because

Table 28

The ABS-MR: Basic Variable List by IBM Card and Column

		Variable[a]	Range of Scores	IBM Card	IBM Column	ABS-MR Page	ABS-MR Item	
Attitude Content	1.	Stereotype	20-60	1	36,38 alter to 74	2-4	1,3	alter to 39
	2.	Normative	20-60	2	36,38 alter to 74	5-7	41,43	79
	3.	Moral Eval.	20-60	3	36,38 alter to 74	8-11	81,83	119
	4.	Hypothetical	20-60	4	36,38 alter to 74	12-14	121,123	159
	5.	Feeling	20-60	5	36-38 alter to 74	15-17	1,3	39
	6.	Action	20-57	6	36,38 alter to 74	18-20	41,43	79
	7.	Total[e]						
Attitude Intensity	8.	Stereotype	20-60	1	37,39 alter to 75	2-4	2,4	40
	9.	Normative	20-60	2	37,39 alter to 75	5-7	42,44	80
	10.	Moral Eval.	20-60	3	37,39 alter to 75	8-11	82,84	120
	11.	Hypothetical	20-60	4	37,39 alter to 75	12-14	122,124	160
	12.	Feeling	20-60	5	37,39 alter to 75	15-17	2,4	40
	13.	Action	20-80	6	37,39 alter to 75	18-20	42,44	80
	14	Total[e]						
V[d]	15.	Efficacy -Cont.	9-36	7	36,38 alter to 52	28,29	107,109	123
	16.	Efficacy -Int.	9-36	7	37,39 alter to 53	28,29	108,110	124
K[c]	17.	MR Knowledge	0-16	7	54-69	30-32	125-140	
Contact	18.	HP Amount	1-5	1-7	28	26	100	
	19.	HP Avoid	1-5	1-7	29	26	101	
	20.	HP Income	1-5	1-7	31	26	103	
	21.	HP Alter	1-5	1-7	32	27	104	
	22.	MR Amount	1-5	1-7	33	27	105	
	23.	MR Enjoy	1-5	1-7	34	27	106	
Demographic	24.	Age	1-5	1-7	10	21	82	
	25.	Educ. Amount	1-5	1-7	15	21	87	
	26.	Religion Impor.	1-5	1-7	14	22	86	
	27.	Religion Adher.	1-5	1-7	24	24	96	
Change Orientation	28.	Self Change	1-4	1-7	16	22	88	
	29.	Child Rearing	1-4	1-7	17	23	89	
	30.	Birth Control	1-4	1-7	18	23	90	
	31.	Automation	1-4	1-7	19	23	91	
	32.	Political Lead.	1-4	1-7	20	23	92	
	33.	Rule Adher.	1-4	1-7	25	25	97	
Educ.	34.	Local Aid	1-4	1-7	21	24	93	
	35.	Federal Aid	1-4	1-7	22	24	94	
	36.	Ed. Planning	1-4	1-7	23	24	95	
Categorical[b] Date	37.	Sex	1-2	1-7	0	21	81	
	38.	Ed. Contact Var.	1-5	1-7	11	21	83	
	39.	Marital Status	1-5	1-7	12	22	84	
	40.	Religion-Affil.	1-5	1-7	13	22	85	
	41.	HP Category	1-5	1-7	26	25	98	
	42.	HP Contact, Kind	1-4	1-7	27	25	99	
	43.	HP Gain	1-4	1-7	30	26	102	

[a] Based on the ABS-MR 3968 edition
[b] Not used in correlational analysis
[c] K=Knowledge
[d] V=Value
[e] Totals not used

predictor variables are themselves interrelated rather than directly predictive of the criterion. In a partial correlation solution to the problem these relationships among the predictor variables are considered in computing the correlation of each variable with the criterion, i.e., the effects of all but one variable are held constant.

The use of mutliple regression analysis has been recommended by Ward (1962) because it "not only reduces the dangers in piecemeal research but also facilitates the investigation of broad problems never before considered 'researchable' (p. 206)." The multiple correlation program yields the following statistics: (a) the beta weights of all predictor variables, (b) a test of significance for each beta weight, and (c) the partial correlations between each predictor and the criterion.

Analysis of Variance and Multiple Means Statistics

The UNEQ1 routine (Ruble, Kiel, & Rafter, 1966b) was used to calculate the one-way analysis of variance statistics. This program is designed to handle unequal frequencies occurring in the various categories.

A two-way analysis of variance design for unequal N's was used to analyze group-sex interaction (Ruble, Paulson & Rafter, 1966). Since the samples were not equal in size or sex ratio within groups, all F tests were based on coefficients represented by the adjusted means. The coefficients on which the adjusted means are based equalizes or accounts for the variance in the size of the group samples. For convenience of computer programming the F statistic was used for testing of all mean differences even though differences between two means are usually tested by the t statistic; results are the same for two means using either test (Edwards, 1965).

While a significant overall F leads to rejection of the statistical hypothesis, it is not known whether every mean is significantly different from every other mean when three or more means are involved. Several multiple means tests have been proposed for determining the differences between treatment means (Winer, 1962). In this research the F test for group comparisons is the usual one with the F test used to test for differences between "adjusted means" or "pairs-of-groups" is equal to a two-tailed t test while also fully accounting for the other experimental factors. This procedure for testing for significance among multiple means is approximately equal to Duncan's Multiple Means Test (Edwards, 1960; Kramer, 1956) up to and including three treatment means. The procedure is somewhat more liberal than Duncan's when more than three means are included, thus increasing the likelihood of Type 1 error. The procedure also does not account for non-independence among the pairs-of-treatment means.

Simplex Approximation

Kaiser (1962) has suggested a procedure for testing a simplex approximation. Kaiser's approach may be seen as performing two functions: (a) the "sorting" and rearranging of all possible arrangements of adjacent pairs of correlation coefficients so as to generate the best empirically possible simplex approximation from adjacent pairs, and (b) the assignment of a statistic, Q^2, to the original and re-arranged matrices. The index Q^2 is a descriptive one, with a range of 0.00 to 1.00.

A computer program was developed at MSU which (a) re-ordered the obtained level member correlations of each ABS-MR matrix by Kaiser's procedure to generate the "best" empirically possible simplex approximation, and (b) calculated the Q^2 for both the obtained and the empirically best ordering of each matrix.

At the time the present research was completed an appropriate likelihood ratio for measuring goodness of fit was not available. Mukherjee (1966) has suggested a method which appears appropriate for matrices of equally spaced correlations but neither the facet theory as originally postulated by Guttman (1959) nor the data obtained to date indicate that the matrices have equally spaced entries.

Table 8 shows the matrices which evolved from the standardization study discussed in Chapter 2. The top section of Table 8 shows the actually obtained matrices for the MSU graduate students in special education-rehabilitation (SER), the MSU education sophomores (ED 200), and the Belize teachers, along with a value of Q^2 for each matrix. The lower section of Table 8 shows the Q^2's for the same data as reordered by Kaiser's (1962) procedure.

Examination of Table 8 indicates that the obtained matrices for the SER and ED 200 groups and the empirically "best" ordered matrices for these two groups were identical, with correspondingly identical Q^2 values. For the Belize group, Levels 5 and 6 are reversed in the obtained and best orderings but the increase in the Q^2 value was minimal, i.e., from .858 to .859 as a result of this reordering.

It will be noted that Kaiser's (1962) method of rearranging the matrices leaves something to be desired in that it does not produce a perfect simplex criterion by which to compare obtained matrices since only adjacent pairs of correlations are reordered. Reordering of adjacent pairs only means that all possible permutations of the data are not obtained. It will be recalled that a perfect simplex exhibits the characteristics of (a) descending absolute correlation coefficients moving from top

to bottom in the columns, and (b) ascending coefficients moving from left to right in the rows.

In addition, at the time of research completion there was no test of significance available for Q^2. Hamersma (1969) accepted six order reversals as the maximum a 6 x 6 matrix could contain and still be accepted as approximating a simplex. He found that by this criterion, a Q^2 value of .60 was minimal and that preferably a value of .70 should be used to consider a matrix as approximating a simplex.

Significance Level

The .05 level was accepted as constituting significance beyond chance level for both correlational and analysis of variance statistics in the present research. Setting the acceptable level of significance at this level results in some danger, of course, in research of this type, which employs large samples and numerous variables, of mistaking spurious yet statistically significant relationships and differences for meaningful ones. However, at the present stage of theory development, it was felt that this danger was more than offset by the cues and guides which might be provided future researchers in this area through statistically significant differences and relationships which might otherwise be overlooked at a more exacting level of signifance.

HYPOTHESES

The variables employed in this study were subjected to statistical treatment to enable comparison of groups or examination of relationships between the criterion or dependent variable (ABS-MR) across each level with 22 independent or predictor variables (15-36 of Table 6). Not all the data are analyzed herein, but will be contained in the forthcoming book.

The following hypotheses[1] were tested:

Relating Attitudes and Values

H-1: Persons who score high in efficacy will score high in positive attitudes toward the mentally retarded on each of the six levels of the ABS-MR

Instrumentation--Attitudes were measured by the ABS-MR contained in Appendix A.3. The scores on each scale ranged from 20 to 60 as shown in Table 6. Efficacy, or the subjects reported sense of control over his environment, was measured by questions 107-124.

Analysis--Pearson Product Moment Correlations between Efficacy and the attitude scores.

Relating Attitudes and Knowledge

H-2: Persons who score high in knowledge about mental retardation will score high in positive attitudes toward the mentally retarded on each of the six levels of the ABS-MR.

Instrumentation--Attitudes were measured as in H-1 and knowledge by questions 125-140 in the questionnaire.

Analysis--Pearson Product Moment Correlations between knowledge scores and attitude scores.

Relating Attitudes and Contact

H-3: The more frequent the contact with the mentally retarded persons the higher will be the intensity scores on each of the

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[1]For purposes of clarity the hypotheses are stated in the research form although the analyses employ the null form.

levels of the ABS-MR.

Instrumentation--Intensity scores of the ABS-MR, measured by the even numered questions on each of the levels, with scores ranging from 20 to 60. Amount of contact with the mentally retarded measured by question 105 in the questionnaire.

Analysis--Pearson Product Moment Correlations between amount of contact and the attitude intensity scores.

H-4: The more frequent the contact with other disability groups the higher will be the scores on the intensity statements on each of the levels of the ABS-MR.

Instrumentation-- Intensity scores measured as in H-3 and contact with other disability groups by question 100 in the questionnaire.

Analysis--Pearson Product Moment Correlations between attitude intensity scores and frequency of contact with other disability groups.

H-5: Contact with mentally retarded persons will be associated with favorable attitudes toward the mentally retarded on each of the levels of the ABS-MR if high frequency is concurrent with (a) alternative rewarding opportunities, (b) ease of avoidance of the contact, (c) enjoyment of the contact.

Instrumentation--Attitudes measured as in H-1, frequency by question 105, alternatives by question 101, avoidance by 104, and enjoyment by 106.

Analysis--Multiple and partial correlations between attitude scores and combined contact measures.

Relating Attitudes and Religiosity

H-6: Persons who score high on stated importance of religion will score low on positive attitudes toward the mentally retarded.

Instrumentation--Attitudes measured as in H-1 and importance of religion by question 86.

Analysis--Pearson Product Moment Correlations between attitude scores and stated importance of religion.

H-7: Persons who score high on stated adherence to religion will score low on positive attitudes toward the mentally retarded

Instrumentation--Attitudes measured as in H-1 and adherence to religion by question 96.

Analysis--Pearson Product Moment Correlations between attitude scores and stated adherence to religion.

Relating Attitudes and Demographic Variables

H-8: Amount of education will be positively related to favorable attitudes toward the mentally retarded.

Instrumentation--Amount of education measured by question 87, with scores ranging from 1-5, indicating coded categories of years of education. Attitudes measured as in H-1.

Analysis--Pearson Product Moment Correlations between attitude scores and amount of education.

H-9: Age will be positively related to favorable attitudes toward the mentally retarded.

Instrumentation--Age was measured by question 82, with scores from 1-5, indicating coded categories of age. Attitudes were measured as in H-1.

Analysis--Pearson Product Moment Correlations between attitude scores and age.

H-10: Women will score higher on positive attitudes toward the mentally retarded than men.

Instrumentation--Attitudes measured as in H-1 and sex by question 81 in the questionnaire.

Analysis--An F test for differences between the scores of men and women equivalent to a t-test.

Relating Attitudes and Change Orientation

H-11: Persons who score high on change orientation will score high on positive attitudes toward the mentally retarded.

Instrumentation--Attitudes measured as in H-1 above and change orientation by a combination of question, 88-92 and 97.

Analysis--Multiple and partial correlations between the change orientation measures and the attitude scores.

H-12: Agreement with federal versus local government aid-to-education will be positively related to favorable attitudes toward the mentally retarded.

Instrumentation--Attitudes measured as in H-1 and aid-to-education measured by questions 93 and 94.

Analysis--Pearson Product Moment Correlations between the attitude scores and reactions to federal and local aid-to-education.

H-13: Agreement with local versus centralized government planning of education will be positively related to favorable attitudes toward the mentally retarded.

Instrumentation--Attitudes measured as in H-1 and reaction to educational planning by question 95.

Analysis--Pearson Product Moment Correlations between the attitude scores and reactions to planning for education.

Relating Attitudes and Group Membership

H-14: The groups will assume the following order with respect to favorable attitudes toward the mentally retarded: 1-SER > 4-PMR > 2-RST > 5-MAN > 8-PNR.

Instrumentation--Attitudes measured as in H-1 and the rank order of the groups by inspection of their obtained means.

Analysis--Analysis of variance and multiple means test procedures.

Relating Attitudes and Multidimensionality

H-15: The ABS-MR six level subscales will form a simplex for all groups and nations.

Instrumentation--Correlation matrix between the ABS-MR six levels.

Analysis--The Kaiser Q^2 test.

CHAPTER 5

RESULTS OF THE STUDY

The basic data for the analysis presented in this chapter are contained in the tables in Appendix A.5. The tables in this chapter are derived from the data represented in these tables. The tables containing the data for the hypotheses of this report are grouped together at the end of this chapter to facilitate reading the narrative rather than inserting the tables throughout the chapter since they are rather voluminous. The forthcoming book[1] will deal with the data more exhaustively than will this report.

This chapter emphasizes the results of specific hypothesis testing. In Chapter 6 the data will be discussed at the "variable, national, and cross-cultural" level. Examination of the tables in Appendix 5, as well as the tables at the end of this report, permits one to: (a) examine the relationships between the variables of the study, i.e., the hypotheses; (b) assess the differentiating effectiveness of variables within, between, and across nations, and (c) ascertain which interest groups (i.e., SER, RST, PMR, MAN, PNR) are most or least alike on each of the 36 variables of the study as listed in Table 6 in Chapter 2. It should be noted that we do not attempt to compare nations but rather <u>we compare interest groups</u> within, between, and across nations. The primary emphasis of this report is in comparing the interest groups combined across-nations and examination of specific hypotheses which relate two or more constructs to one another, such as amount of contact and attitude favorableness. The forthcoming book will examine in detail the data within, between, and across nations.

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[1]See footnote on page ii.

Examination of the data in Appendix 5 and the items in the ABS-MR instrument allows one to determine the characteristics of the subjects such as age, education, income, etc. These will not be examined in detail in this report since the emphasis is on hypothesis testing.

Methods of sample selection indicate that the SER group is probably most representative, followed respectively by the PMR, RST, PNR, and MAN samples.

Some of the data have been previously analyzed by several investigators (Gottlieb, 1971; Harrelson, 1969; Morin, 1969; Vurdelja, 1970) who were part of the research team. Various research reports have also used portions of the data (Jordan, 1970; Jordan, 1971a, 1971b; Vurdelja and Jordan, 1971). The analyses contained in this report, however, present for the first time the comparative results of the entire seven-nation study.

Examination of the entire list of variables in Table 6 indicates the extensive amount of data that have been gathered. It is also projected that a series of research reports will be written and published locally in each of the nations of the study in collaboration with nationals from each country. The local national reports will deal with issues of particular relevance to that nation as determined by the research collaborators in the nation (see Appendix A.4 for research counterpart personnel).

DATA ANALYSIS

For purposes of reader clarity, none of the hypotheses in this report are stated in the null form. However, in the statistical analysis it is the null form which was tested. As stated previously, the .05 level of statistical significance was established as necessary for an hypothesis to be accepted.

ABS-MR Reliability and Validity

It was pointed out in Chapter 3 that the ABS-MR content and intensity scores could be combined into one score for each subject according to the procedures described in Table 7. This report, however, uses only the content scores but the projected book will use both content and intensity procedures. Table 10 contains the reliability figures for the test development data as determined by the Hoyt analysis of variance method for determining reliability. Reliabilities for the test development samples ranged from .60 to .85. Reliability estimates obtained by the same procedures on the seven-nation data indicate the reliabilities are equal to or, in many instances, better than those obtained on the test development samples. For example, the results of Vurdelja (1970), on the attitudes of mothers in four nations yielded reliability figures better than those often obtained on individual tests: of the 60 reliability figures obtained by Vurdelja, 31 were .90 plus, eight were between .80-.89, 10 between .70-.79, nine between .60-.69, and only two between .50-.59.

Validity of the ABS-MR was assessed by the "known group" method and by the results of the simplex test described in Hypothesis 15. Examination of the data in Appendix A.5 and the data in the tables of this chapter indicate that the groups do score approximately as expected with the SER and PMR usually scoring more positively toward the mentally retarded, especially at the action oriented levels represented by Levels 3-6 of the ABS-MR.

As pointed out previously, the projected book will contain a detailed analysis of the reliability and validity data by individual interest groups and nations.

The remainder of this chapter will be devoted to an analysis of the data as it relates to the research hypotheses. It will be noted throughout

this chapter that the figures represented in the tables do not always agree exactly with the sample sizes presented in Table 27 of Chapter 4. This is due to a combination of incompletely filled out questionnaires and computer procedures which drop subjects who do not indicate their sex. Because of the relatively large sample sizes involved, it was not felt that missing data constituted a serious problem and all statistics are based on the N's reported in the tables.

It will be noted in connection with several correlational hypotheses that larger correlations appear for the total sample than for the individual interest group samples, which suggests homogeneity within and differences between groups with regard to the predictor variables in these instances. The means and standard deviations of the predictor variables used in this study may be found in the tables in Appendix A.5 which should be consulted in conjunction with Table 6. The projected book will deal with the total data contained in the Appendices more completely than does this report.

H-1: Persons who score high in efficacy will score high in positive attitudes toward the mentally retarded on each of the six levels of the ABS-MR.

It will be recalled from Chapter 1 and 2 that the Efficacy scale was designed to measure the subject's view of man's effectiveness in the face of his natural environment. Hypothesis 1 was tested by correlating scores on the Efficacy scale with scores on the six levels of the ABS-MR. Tables 30-62 contain the results for the individual national samples as well as the totals of the interest group samples which are contained in Tables 55-62.

Examination of Tables 30-54 versus the correlations in Tables 55-62 indicates, as pointed out previously, homogeniety within the individual samples and differences between interest groups when combined across nations.

Tables 55-62 indicate correlations that are both larger and statistically more significant than those generally found in Tables 30-54. However, even the correlations contained in the individual national samples of Tables 30-54 indicate many significant correlations between Efficacy and attitudes. Efficacy, or variable number 15 of Table 6, is, in other words, often predictive of positive attitudes toward the mentally retarded. This is less so, however, for the MAN group than any other group. It could be hypothesized that the MAN group as a rule has less contact with the mentally retarded than any of the other groups; and that those who score high on Efficacy who are in leadership positions in management or executive positions may not relate as favorably to the mentally retarded as others since they may see the retarded as interfering with or limiting production in some manner.

However, as a general statement, the data do indicate a relationship between Efficacy and positive attitudes, thus Hypothesis 1 is supported.

H-2: Persons who score high in knowledge about mental retardation will score high in positive attitudes toward the mentally retarded on each of the six levels of the ABS-MR.

The data throughout Tables 30-62 do not generally support the hypothesis. In fact, the relationship often is the opposite of that postulated, i.e., high knowledge scores indicate negative attitudes toward the mentally retarded, especially at Levels 3-6, i.e., the more personal levels. The data indicate that knowledge is more likely to be predictive of positive attitudes at Levels 1 and 2, the cognitive and other-oriented levels.

In summary, the data generally indicate that Hypothesis 2 was not supported.

H-3: The more frequent the contact with mentally retarded persons the higher will be the intensity scores on each of the levels of the ABS-MR.

H-4: The more frequent the contact with other disability groups the higher will be the scores on the intensity statements on each of the levels of the ABS-MR.

Table 70 contains the data on the relationship between the ABS-MR intensity scores and contact with mentally retarded persons as well as contact with handicapped persons in general.

It will be recalled that intensity was measured by separate questions for each of the attitude items. The intensity variable (numbers 8-13 of Table 6) is highly predictive of positive attitudes toward the mentally retarded at Levels 4-6; Hypothetical Action, Actual Feeling, and Actual Action levels. The intensity variable was not significantly related to attitudes toward the mentally retarded at either the Stereotypic or Normative levels.

The intensity variable was also predictive of positive attitudes toward handicapped persons at the Feeling (Level 5), Normative (Level 1), and Moral Evaluation (Level 3) levels. In other words, amount of contact per se is more predictive of intensity of feelings toward the mentally retarded than it is toward intensity of feelings toward handicapped persons in general. The data also indicate that contact is not uniformly related to positiveness of attitudes but is differentially related at each of the six levels for both mentally retarded and handicapped persons in general. This indicates again the utility of the facet theory evolved six-level ABS-MR instrument. Hypothesis 3 and 4 are regarded as partially supported.

H-5: Contact with mentally retarded persons will be associated with favorable attitudes toward the mentally retarded on each of the levels of the ABS-MR if high frequency is concurrent with (a) alternative rewarding opportunities, (b) avoidance of the contact, and (c) enjoyment of the contact.

Hypothesis 5 was tested by correlating the scores on the ABS-MR with item 5 (amount of contact), item 104 (alternatives to contact), item 101 (possibility of avoidance of contact), and item 106 (enjoyment of contact with mentally retarded).

Some difficulty was encountered in testing and/or interpreting the results of this hypothesis. As pointed out by Harrelson (1969, p. 125) a great deal of difficulty was encountered in testing this hypothesis because of errors in the construction of the personal Questionnaire. As indicated by the hypothesis, it had originally been hoped that a multiple correlation analysis could be conducted with (a) amount of contact, (b) alternative rewarding opportunities, (c) ease of avoidance, and (d) enjoyment of the contact as partial correlates. Because of instrumentation, however, (b) and (c) referred to "other" disability groups in questionnaire item 98, while (a) and (d) referred to amount and enjoyment of contact with mentally-retarded-only, measured by items 105 and 106. Because of the computer programming difficulties arising from this error, large numbers of subjects would have to be dropped to account for the error. Harrelson decided to test only the "amount" and "enjoyment" aspect of the hypothesis in two straight-forward correlational analyses. However, the present report will carry through with the hypotheses as intended and also present the two straight-forward analyses.

Tables 63-69 contain the partial and multiple correlations for Hypothesis 5 and 6 and a combination of 5 with knowledge and efficacy. Tables 63-69

indicate the multiple correlations are highly significant for most of the interest groups (SER,RST,PMR,MAN). The tables also indicate that a combination of variables of efficacy, knowledge, contact specifically with mentally retarded, and amount of age and education are more predictive of favorable attitudes toward the retarded than are either the combined contact variables or the combined change orientation variables. Examination of Table 63 indicates the nature of the testing of the hypothesis: variables 18-23 constitute the combined contact variables, variables 15, 17, and 22-25 constitute the combined efficacy-knowledge-contact-age-education variables, and variables 28-33 constitute the combined change orientation variables.

Analysis of variables 18-23 throughout Tables 63-69 indicates that enjoyment of contact is generally more predictive of positive attitudes than any of the other individual contact variables, especially at Levels 4-6, the more affective and action-oriented levels.

The data generally indicate that Hypothesis 5 is supported.

H-6: Persons who score high on stated importance of religion will score low on positive attitudes toward the mentally retarded.

Hypothesis 6 was tested by correlating the six ABS-MR scale levels with responses to item 86 in the questionnaire section of the instrument which asks the subject to rate the importance to him of his religion in his daily life. Tables 30-62 show the correlations for the various sample groups between the ABS-MR levels and the importance of religion variable.

The results of testing Hypothesis 6 reveals again the homogeneity within and differences between samples. Tables 30-54 contain the results by individual samples and Tables 55-62 contain the data from the combined interest groups (SER, RST, PMR, MAN, PNR, females, males, and total sample). Tables

30-54 contain few significant findings, and these in a scattered random manner, whereas Tables 55-62 indicate many significant findings. The significant findings of these latter tables are not merely a result of the larger sample sizes resulting from combining the interest groups. It will be noticed that the correlations are both larger in "absolute size" as well as being more significant than those in Tables 30-54. This is again an indication of greater variance and indicates that religiosity as a variable is perhaps homogeneous enough within individual national samples as to be non-predictive of attitudes toward the mentally retarded whereas stated importance of religion is significantly related as a construct to positive attitudes when the two variables are distributed on a wider continuum represented by the scores obtained by combining the groups across nations.

H-7: Persons who score high on stated adherence to relition will score low on positive attitudes toward the mentally retarded.

Hypothesis 7 was tested by correlating the ABS-MR with the extent to which the subjects stated they observed the rules and regulations of their religion as measured by 96 item in the questionnaire. Tables 30-62 present these correlations for the samples. The data are essentially in accord with those of Hypothesis 6 on stated importance of religion.

However, the data in the tables do indicate that stated adherence to religion is more related to attitudes toward the retarded than is stated importance. The same observations pertain with reference to the data from the individual samples as compared to the data combined from the interest groups across nations. The correlations from the latter groups are more significant, i.e., when relating stated adherence to religion and attitudes cross-nationally than when related intra-nationally.

Examination of the data in Tables 30-62 reveals some interesting observations. The relationship between attitudes and importance and adherence to religion are stronger for the manager group than for any of the other groups. This relates to the often observed relationship of the "importance" of religion to businessmen. The dynamics or interpretation of this is, of course, another issue.

It is also interesting to observe the relationships between the religion variables and attitudes in a socialist country, such as Yugoslavia, in accord with the "non-importance" attached to religion in such countries. The relationship between attitudes and religiosity for the parents of the mentally retarded are higher in Yugoslavia than in any of the other sample groups. It would be interesting to further test this observation to see if it is really "true" or was a function of some other influence, such as sample selection.

H-8: Amount of education will be positively related to favorable attitudes toward the mentally retarded.

Hypothesis 8 was tested by correlating the ABS-MR with responses to item 87 in the questionnaire which asks the subject to report his highest level of education. The correlations for the sample groups are give in Table 30-62.

Examination of the data indicate again the higher relationship between the two variables of attitudes and education for the total interest group samples than for the individual national samples. The analysis of the data for the two variables throughout all the tables, however, indicate a rather sporadic and random relationship except in a few instances such as Brazil and the

manager group for which the relationships were higher. The most important observation is the differential manner in which amount of education relates to the six levels of the ABS-MR. In other words, there is no one relationship between amount of education and attitudes toward the mentally retarded but it varies depending on which of the six levels is being specified.

Hypothesis 8 is regarded as supported in only a limited manner and then only for certain levels and/or for certain groups.

H-9: Age will be positively related to favorable attitudes toward the mentally retarded.

Hypothesis 9 was tested by correlating the ABS-MR with the respondants age as determined by item 82 in the questionnaire section of the instrument. These correlations appear in Tables 30-62 for the various sample groups. Analysis of the data for the combined interest groups (Table 55-62) indicate some interesting observations:

1. SER group--no significant relationships,
2. RST group--shows a negative relationship between positive attitudes toward the retarded and the perceived Norms of society; they achieve a positive relationship between their own Feelings toward retardation and age, and they achieve a negative relationship between their own Actual Action (involvement) with the mentally retarded and their attitudes toward retardation,
3. PMR group--as parents of the mentally retarded get older they see the Stereotypes of society as being inadequate as well as the Norms of society being inadequate and not "right." They also indicate a highly statistically significant relationship between the Actual Action level with the retarded as they grow older. This can also

be regarded as a validity indication for the ABS-MR as it would be somewhat incongruous for parents of the retarded to say "we have less involvement" with the retarded as they themselves grew older; thus, spending more time with their own retarded children.

4. MAN group--the manager or executive, as he grows older, sees the Stereotypes of society and Norms as being inadequate. He also grows more positive in his own Feelings and Actual Action toward the retarded. This is an interesting observation since the managers throughout the study often score lower in their own attitudes when compared to other groups. This is perhaps an indication that as managers or executives grow older they see that the mentally retarded could do many more things than they had thought when they were younger. In terms of dynamics it might also indicate that as managers grow older, thus having less time or need to compete agressively in the industrial labor market, they feel more positive toward the mentally retarded whom they previously perceived as being less able to compete agressively.

H-10: Women will score higher on positive attitudes toward the mentally retarded than men.

The hypothesis specifies the relationship between sex and attitudes generically and not within groups or nations. The data of Table 71, however, permit an examination of the relationship between the constructs of attitude and sex within groups. The data of Table 71 indicate there is a significant difference between males and females on attitudes at Levels 3-5; the Moral Evaluation, Hypothetical Behavior, and Actual Feeling levels, but no difference between the sexes on the Stereotypic, Normative, or Actual Action levels. However, in all three instances in which there was a significant

difference between males and females it was in the opposite direction to that hypothesized; males were more positive in their attitudes toward the mentally retarded than were females.

This is a finding in somewhat complete disagreement with most studies on attitudes toward children or related objects regarded in a succorant position where women are postulated to be more so. It could be hypothesized that the relationship of the mother to the retarded child is much more aniexty producing and also threatening since she is more often the one regarded as having "produced" a mentally defective child than is the male. Hypothesis 10 was not supported.

H-11: Persons who score high on change orientation will score high on positive attitudes toward the mentally retarded.

Hypothesis 11 was tested by a multiple correlation program which produced a multiple correlation between responses to the six change orientation questions and each of the ABS-MR levels for each of the samples. In this report only the scores on relationships for the total interest groups (SER, RST, PMR, MAN, PNR) will be analyzed but the forthcoming book will contain an analysis for the samples for each nation.

In addition the multiple correlation program produced a partial correlation between each change orientation variable and the various ABS-MR levels with the remaining change orientation variables "partialled out" or held constant. The change orientation questions dealt with self change (item 88), child rearing (item 89), birth control (item 90), automation (item 91), political leadership change (item 92), and rule adherence (item 97). The results of the multiple regression analyses are presented in Tables 63-69.

Close examination of the data in these tables indicate that in all instances the multiple correlation is significant and in most cases beyond

the .005 level. Only a few instances were significant at the .02 level. All the multiple correlations were statistically significant. The actual size of the correlations are, however, quite low and particularly the sizes of the partial correlations for the individual variables.

Variable number 30, attitudes toward birth control, was generally related more strongly to attitudes toward retardation than any of the other individual change orientation variables. The unexpected finding, however, was the negative relationship between attitudes toward birth control and positive attitudes toward the mentally retarded. The negative relationship indicates that positive attitudes toward mental retardation and negative attitudes toward birth control "go together." Both the literature and common sense would have suggested a positive relationship between the variables of birth control and positive attitudes toward the mentally retarded but the data do not indicate such.

The data indicate that Hypothesis 11 was not supported.

H-12: Agreement with federal versus local government-aid-to-education will be positively related to favorable attitudes toward the mentally retarded.

Hypothesis 12 was tested by correlating the ABS-MR levels with items 93 and 94 in the personal questionnaire which deal respectively with opinions regarding increased federal and local government financial support of education. These correlations are reported for the samples of the study in Tables 30-62.

Tables 30-62 indicate that the education variables bear the strongest relationship to ABS-MR attitudes in the manager group where nine of the 12 scale level correlations reach significance. A number of other significant correlations are scattered throughout the individual samples of Tables 30-54 but no readily apparent pattern appears in the correlations.

In summary, Hypothesis 12 is generally supported with the MAN group and is partially supported for the total sample as well as the total male and female sample.

H-13: Agreement with centralized government planning for education will be positively related to favorable attitudes toward the mentally retarded.

Hypothesis 13 was tested by correlating the ABS-MR with responses to item 95 of the personal questionnaire. This item measures the extent to which education should be planned by governmental agencies, on a continuum ranging from planning directed primarily by the church to planning directed primarily by the federal government. The resulting correlations are contained in Tables 30-62.

Analysis of Tables 30-54, which contain the individual national samples, indicate that centralized governmental educational planning is not related to positive attitudes toward the mentally retarded in any consistent manner except for the Brazil manager group. It will be noticed that the Brazil manager group has been generally different from many of the other groups of the study and that an unusually high number of significant correlations are obtained for all variables. It would be interesting to explore these relationships to see if they are "true" or if this sample of Brazilian managers are not representative of managers in Brazil. The other interesting observation from examination of the tables is the large number of negative relationships between centralized educational planning and positive attitudes toward the mentally retarded. The implication is that positive attitudes toward the mentally retarded go with local educational planning versus federal planning.

As pointed out by Morin (1969, pp. 133-134) the apparent "preference" for local planning contains important implications for retardation. The rationale for this hypothesis was that centralized planning is more progressive, imposes more rigorous standards, and has a greater economic and experience base from which educational innovations can be developed and implemented. Agreement with centralized educational planning then would reflect an awareness of the positive influences such planning could have on the lives of the retarded.

As pointed out by Morin: "The desire for local planning could very well result in less attention to special education programs because the thrust behind such programs has come from federal agencies. Such a finding, if not a chance occurance is ominous as it relates to meeting needs of mentally retarded children (Morin, 1969, p. 134).

H-14: The groups will assume the following order with respect to favorable attitudes toward the mentally retarded: SER > PMR > RST > MAN > PNR.

Hypothesis 14 was tested through an analysis of variance procedure for each of the samples on each of the ABS-MR scale levels using means adjusted for sample size and sex differences. The multiple means test procedures described in the methodology chapter permitted the testing of each mean against every other mean, producing an F test equivalent to a two-tailed t test. Partial analysis of these data appear in Table 71 where the sample groups are listed and the analysis for group differences and sex differences are shown.

It will be noted that the groups assumed the hypothesized order only on ABS-MR Level 5--the Actual Feeling level. Harrelson's study (1969, p. 151) obtained the hypothesized order on the Hypothetical Behavior level rather than the Actual Feeling level as in this study. As with Harrelson,

the rank order results obtained here, however, did not produce significant differences between all of the means at Level 5. A complete analysis of the multiple means results of these data will be contained in the forthcoming book.

As previously pointed out by Harrelson (1969, p. 151), a definite change of direction seems to occur in many cases between Level 2 and Level 3 where the "referent"--the person to whom the opinion or behavior is attributed--shifts from "other" to self." This phenomena is once again demonstrated in several of the groups of this study rather clearly when the scores shift as indicated.

It is quite apparent at this point that the <u>total</u> scores on the ABS-MR would be relatively meaningless since different dimensions of attitudes seem to be measured in a non-additive fashion. This again indicates the multidimensional nature of attitudes.

Examination of the size of the means and their order in Table 71 indicate an interesting rationale about their relationships. Level 1 indicates the stereotypes of society, Level 2 indicates the usual thing that society does; Level 3--the right thing to do with regard to the retarded; Level 4--what one hypothesizes he would do toward the retarded; Level 5--how one acutally feels or has felt toward the retarded, and Level 6--one's actual action or behavior with the retarded. An examination of the rank order of the means indicates that an order seems to exist such that Level 2 is greater than 1, Level 3 greater than 2, and that a diminishing pattern seems to then set in such that Level 4 is less than Level 3, Level 5 is less than Level 4, and Level 6 is less than Level 5.

This indicates a circumflex order in the data and should be explored by the Guttman non-metric analyses procedures. In terms of the absolute size of the means, it will also be observed that the Actual Action level

scores are somewhat between Stereotypes and Norms. This may also be the reason that past attitude scales have worked as well as they have, in spite of their inadequate conceptualization, since it suggests that Actual Action is somewhat closer to the Normative or Stereotypic level than it is to the Hypothetical Behavior or Actual Feeling level.

When the rank order of the groups is examined in Table 71, other interesting observations appear. It will be noticed that managers have the lowest scores, or most negative attitudes, toward the retarded at the Stereotypic level and the Action levels. It will also be observed that the PMR group has higher scores on Hypothetical Behavior and Actual Feeling levels but place in the middle on Actual Action. The two groups having more positive attitudes at the Actual Action levels are the two most highly educated groups and the two groups with most experience with children in an educational setting. Perhaps this accounts for their more favorable attitudes at the Action level than those of parents of retarded.

It will also be observed that the SER group, those who work with the retarded, see the Stereotypes of society as being worse than does any other group. The SER group also sees the Norms of society as being worse than any other group but paradoxically also scores the lowest at the Moral Evaluation level or the level which indicates what should be done for the retarded. This raises again the issue pointed out in the scale development discussion of the ABS-MR about the "realistic nature" of the item scoring. In other words, are the SER people being more negative in what they say should be done for the mentally retarded or are they being more "realistic" in their evaluations of the potential of the retarded. Again, it will be noted that Level 5 is the only level where the groups assume the postulated rank order.

The discussion of Table 71 and Hypothesis 14 rather dramatically illustrates the multidimensional character of the ABS-MR. It also illustrates why the predictor variables (variables number 15-36, Table 6) relate differentially to each of the six ABS-MR levels.

H-15: The ABS-MR scale levels or attitude subuniverses will form a Guttman simplex for each of the sample groups.

Hypothesis 15 was tested by plotting the content scale level intercorrelation matrices for each sample and subjecting these matrices to Kaiser's (1962) simplex approximation test as described in Chapter 4. Q^2 generates a goodness of fit value for the empirically obtained matrices and then rearranges these matrices into the "best" simplex order for which a Q^2 value is also given. Table 29 contains the Q^2 values for the obtained and reordered matrices for each of the sample groups. The data section of the Appendix contains illustrations of the Q^2 matrices and the forthcoming book will contain all of the matrices and an extensive discussion of them.

Harrelson (1969) extensively discusses the strengths and weaknesses of the simplex approximation test, and summarizes his discussion as follows: Neither Guttman's (1959) contiguity hypothesis on which the simplex model is based nor Kaiser's (1962) simplex approximation test takes into account the occurance of non-positive correlations. Since a number of negative correlations appeared in the matrices throughout our data, the possible meanings of these negative correlations were ignored in computing Q^2 values and reordering of matrices. Although a number of limitations of the simplex approximation test as applied to these data have been listed, it is currently the best and most objective measure available, and by its standard a simplex may be considered to have been obtained in 19 of the 25 research groups listed in Table 29; excluding the test development sample of Belize

and the combined male and female samples. It will be noted that the greatest difficulty was with the samples in Brazil where none of the three samples met the simplex requirement.

The data of Table 29 indicate that Hypothesis 15 was supported.

Table 29

Q^2 Figures from the Simplex Analysis of the Nations[a] and Research Groups[b] for the ABS-MR Study

Group[b]	Q^2	1 BEL	2 BRA	3 COL	4 GER	5 ISR	6 YUG	United States 7 KEN	8 MIC	9 TEX
1-SER	O[c]	---	.67	.63	.84	.84	---	.77	---	.80
	B	---	.91	.89	.86	.86	---	.86	---	.87
2-RST	O	.95	---	.88	.74	---	---	.86	---	.85
	B	.95	---	.88	.82	---	---	.93	---	.91
4-PMR	O	---	---	.87	.69	.41	.83	---	.94	.87
	B	---	---	.92	.87	.72	.85	---	.94	.90
5-MAN	O	---	.30	---	.73	---	---	.54	---	---
	B	---	.97	---	.82	---	---	.69	---	---
8-PNR	O	---	.40	---	.84	.78	.89	---	.73	.78
	B	---	.92	---	.84	.88	.89	---	.94	.83

[a]BEL=Belize
BRA=Brazil
COL=Colombia
GER=Germany
ISR=Israel
YUG=Yugoslavia
KEN=Kentucky
MIC=Michigan
Tex=Texas

[b]1-SER=Special education/rehab personnel
2-RST=Regular school teachers
4-PMR=Parents of mentally retarded
8-PNR=Parents of non-retarded
5-MAN=Managers/Executives

[c]O=obtained Q^2
B="best" Q^2 by Kaiser (1962) method.

TABLE 30

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Brazil SER[c] Sample

Var. No.[b]		ABS-MR Levels					
		1-Stereo.	2-Norm.	3-Moral	4-Hypo.	5-Feel	6-Action
15	Efficacy-Con.	91/31/30	20/31/26	27/31/11	51/31/003	64/31/005	63/31/005
16	Efficacy-Int.	01/31/95	09/31/33	18/31/33	41/31/01	40/31/02	45/31/008
17	MR Knowledge	16/31/37	-10/31/56	47/31/006	32/31/07	08/31/65	08/31/65
18	HP[c] Amount	- - -	- - -	- - -	- - -	- - -	- - -
19	HP Avoid	29/25/14	-35/25/07	40/25/04	26/25/18	04/25/85	15/25/46
20	HP Income	10/22/63	15/22/47	-30/22/15	-17/22/41	08/22/69	-02/22/93
21	HP Alter.	-11/27/55	-34/27/07	30/27/11	21/27/27	-02/27/70	13/27/49
22	MR Amount	-38/27/04	29/27/88	05/27/78	05/27/78	09/27/64	-02/27/22
23	MR Enjoyment	-30/30/09	-18/30/31	19/30/31	21/30/25	-05/30/76	-01/30/98
24	Age	01/31/99	-17/31/35	-13/31/46	11/31/57	14/31/44	36/31/04
25	Educ. Amount	17/30/34	10/30/59	10/30/59	-12/30/50	-17/30/36	-21/30/25
26	Rel. Import.	16/3/36	-13/31/46	56/31/001	55/31/001	36/31/04	30/31/03
27	Rel. Adher.	18/3/33	26/31/14	17/31/35	29/31/10	42/31/01	28/31/10
28	Self Change	31/30/08	11/30/54	-18/30/31	-25/30/16	-03/30/88	-11/30/53
29	Child Rear.	-09/31/62	-16/31/38	-01/31/99	-17/31/35	-23/31/18	-16/31/37
30	Birth Cont.	13/30/46	-12/30/50	-08/30/68	-26/30/15	-24/30/19	-28/30/12
31	Automation	23/31/19	-25/31/16	47/31/006	21/31/15	-02/31/89	16/31/36
32	Polit. Lead.	33/31/06	46/31/007	-03/31/85	12/31/50	48/31/005	16/31/36
33	Rule Adher.	-08/31/65	-06/31/71	06/31/74	-19/31/29	-33/31/05	-21/31/23
34	Local Aid	34/30/05	-07/30/69	80/30/005	76/30/005	47/30/007	69/30/005
35	Federal Aid	32/31/06	-07/30/71	86/31/005	78/31/005	53/31/001	66/31/005
36	Ed. Planning	10/30/57	-14/30/44	41/30/02	29/30/11	05/30/78	22/30/23

[a]Three entrees are contained under each level: the first is the correlation, the second the sample size, and the third is the significance level.

[b]See Table 6 for names and meaning of variables.

[c]SER=Special education/rehabilitation personnel.

Note: Correlations significant at .05 or better are circled in Tables 30-71.

TABLE 31

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Colombia SER[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-03/33/85	-15/33/38	21/33/21	14/33/41	-14/33/39	33/33/05
16	-16/33/35	11/33/53	-12/33/50	11/33/54	35/33/03	18/33/29
17	-10/33/55	-01/33/98	-42/33/01	08/33/67	06/33/78	-16/33/37
18	25/33/14	-13/33/47	-17/33/32	39/33/02	13/33/44	02/33/93
19	-19/31/29	-06/31/72	18/31/31	22/31/21	-18/31/21	06/31/74
20	-05/31/80	29/31/10	-29/31/10	-12/31/50	-31/31/08	-47/31/006
21	08/32/63	-14/13/43	-25/32/16	30/32/08	10/32/56	07/32/71
22	-13/33/44	-15/33/40	-14/33/40	27/33/11	-12/33/46	32/33/06
23	02/33/90	-17/33/32	-01/33/93	52/33/001	08/33/65	26/33/13
24	07/33/70	08/33/63	27/33/12	29/33/09	04/33/80	55/33/001
25	19/3/27	-30/31/09	04/31/81	16/31/38	09/31/62	-07/31/71
26	07/33/68	08/33/65	20/33/25	30/33/07	-01/33/97	04/33/80
27	-19/33/28	16/33/34	14/33/42	07/33/68	-04/33/81	07/33/68
28	12/32/49	-03/32/85	-02/32/90	-06/32/37	11/32/52	28/32/11
29	-15/31/39	01/31/97	39/31/02	18/31/32	01/31/95	17/31/34
30	07/32/ 69	-39/32/02	-11/ 32/52	13/32/47	-16/32/37	22/32/22
31	-13/30/47	-01/30/94	05/30/76	25/30/16	-17/30/34	05/30/77
32	-11/32/52	28/32/11	-12/32/49	-01/32/95	-12/32/48	20/32/24
33	-01/32/94	-15/32/39	30/32/08	-10/32/58	-26/32/14	12/32/51
34	01/33/98	26/33/12	04/33/80	06/33/76	13/33/46	01/33/94
35	01/33/98	26/33/12	04/33/80	05/33/76	13/33/46	01/33/94
36	07/29/73	15/29/41	-05/39/82	-20/29/27	-06/29/76	-10/29/56

[a]See Table 30 for footnotes a, b, c.

TABLE 32

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Germany SER[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-71/147/005	36/147/005	61/147/005	-08/147/35	-31/147/005	-39/147/005
16	-72/146/005	35/146/005	62/146/005	-10/146/22	-38/146/005	-30/146/005
17	-76/147/005	41/147/005	68/147/005	-17/147/03	-51/147/005	-47/147/005
18	12/147/15	-19/147/01	-09/147/28	04/147/62	-04/147/59	10/147/20
19	02/147/84	02/147/84	06/147/44	01/147/98	-05/147/52	03/147/67
20	05/147/56	-10/147/21	-09/147/28	12/147/14	13/147/12	12/147/15
21	-08/147/28	01/147/91	14/147/08	-07/147/41	07/147/40	-03/147/76
22	03/146/69	-11/146/20	-07/146/41	-05/146/53	12/146/18	11/146/18
23	15/146/07	-11/146/05	-16/146/05	07/146/37	12/147/15	10/146/22
24	20/147/01	-08/147/30	-19/147/02	08/147/34	11/147/19	26/137/001
25	-10/146/23	10/146/21	08/146/30	-09/146/25	-06/146/49	-18/146/03
26	01/147/89	08/147/32	02/147/84	-01/147/86	-06/147/46	08/147/34
27	-07/147/37	09/147/30	07/147/42	-02/147/15	01/147/92	-01/147/98
28	-01/147/97	-03/147/70	04/147/64	08/147/33	04/147/60	-02/148/83
29	16/147/05	-13/146/10	-02/146/80	13/146/12	06/146/48	05/146/58
30	05/147/50	01/147/86	05/147/54	-02/147/79	-03/147/64	02/147/81
31	09/147/27	04/147/67	04/147/66	-01/147/90	03/147/68	-05/147/54
32	16/147/05	-25/147/002	-07/147/04	-10/147/22	04/147/59	06/147/43
33	-03/147/74	15/147/06	07/147/39	10/147/24	-08/147/30	-03/147/71
34	06/147/48	-01/147/88	02/147/81	06/147/49	-02/147/77	01/147/90
35	07/147/36	03/147/72	03/147/66	-03/147/74	-04/147/60	-02/147/88
36	-06/147/46	-01/147/97	04/147/64	-01/147/90	-10/147/23	02/147/86

[a]See Table 30 for footnotes a, b, c.

TABLE 33

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Israel SER[c] Sample

Var. No.[b]	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	29/73/01	34/73/002	26/74/02	27/74/01	45/74/005	27/74/01
16	33/73/004	32/73/005	10/74/39	20/74/08	19/74/10	18/74/13
17	32/73/005	05/73/69	-09/74/41	14/74/24	25/74/03	18/74/12
18	-42/68/005	-19/68/11	03/69/80	09/69/46	02/69/86	-03/69/81
19	27/56/03	-01/56/92	02/57/91	32/57/01	-06/57/64	16/57/21
20	----------	---------	---------	---------	---------	---------
21	01/57/97	02/57/90	06/58/67	14/58/28	-08/58/52	23/58/08
22	-21/62/10	05/62/71	13/63/31	08/63/52	10/63/41	25/63/04
23	-03/63/81	23/63/06	23/64/06	22/64/07	01/64/97	43/64/005
24	-16/74/15	-05/74/69	-04/75/74	04/75/73	-20/75/09	14/75/22
25	01/67/92	09/67/46	09/68/48	20/68/10	05/68/69	22/68/06
26	04/71/75	08/71/49	09/72/44	06/72/63	06/72/62	16/72/18
27	01/72/90	20/72/08	07/73/57	04/73/74	25/73/03	23/73/04
28	27/69/02	-01/69/96	-01/70/91	11/70/36	-11/70/34	-03/70/77
29	02/70/86	-08/70/50	10/71/41	09/71/45	-03/71/75	14/71/25
30	-20/67/09	-25/67/03	-01/68/93	-05/68/65	11/68/37	-05/68/68
31	13/69/27	02/69/85	06/70/63	15/70/22	15/70/21	10/70/38
32	-17/70/14	-10/70/39	-04/71/70	01/71/93	01/71/90	-10/71/41
33	01/58/98	-01/58/97	-01/58/92	09/58/47	08/58/56	29/58/02
34	-16/70/16	03/70/78	01/71/93	-23/71/05	-01/71/95	-07/71/54
35	-23/71/04	-08/71/48	-03/72/77	-07/72/55	03/72/78	08/72/51
36	-13/69/29	-14/69/24	-16/70/18	-02/70/88	07/70/57	-17/70/15

[a]See Table 30 for footnotes a, b, c.

TABLE 34

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the U.S. Kentucky SER[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-31/50/02	-34/50/01	19/50/18	26/50/05	28/50/04	22/50/12
16	04/50/77	04/50/77	16/50/26	23/50/10	24/50/08	22/50/11
17	-27/50/05	-01/50/96	04/50/77	27/50/04	-02/50/88	35/50/01
18	-19/48/19	-09/48/53	-02/48/88	23/48/10	04/48/76	38/48/01
19	12/48/42	-01/48/92	24/48/09	06/48/67	-01/48/95	-004/48/97
20	-22/49/11	06/49/65	004/49/97	30/49/03	04/49/75	31/49/02
21	-15/50/28	-04/50/80	-02/50/89	26/50/06	10/50/48	23/50/10
22	03/50/83	16/50/24	14/50/32	-01/50/92	-17/50/23	17/50/22
23	05/50/75	-04/50/75	-04/50/77	-05/50/72	14/50/32	13/50/36
24	-03/50/85	-05/50/71	04/50/80	-24/50/08	-29/50/03	01/50/95
25	-01/49/93	09/49/53	07/49/64	10/49/49	-16/49/25	34/49/01
26	-10/50/46	14/50/32	-20/50/16	-32/50/02	-27/50/05	-07/50/60
27	-31/50/02	02/50/90	-07/50/60	19/50/18	04/50/76	07/50/60
28	-09/50/53	-002/50/98	-14/50/34	-17/50/24	28/50/04	-05/50/70
29	-01/50/95	-17/50/23	05/50/70	03/50/83	-12/50/41	20/50/15
30	-08/49/56	-01/49/94	23/49/11	19/49/19	14/49/31	12/49/38
31	03/50/84	03/50/83	30/50/03	15/50/30	01/50/95	-08/50/59
32	08/50/57	-14/50/31	-24/50/08	-01/50/92	30/50/03	-07/50/63
33	-34/50/01	-08/50/58	24/50/09	15/50/27	-07/50/63	13/50/34
34	11/50/42	004/50/97	28/50/04	16/50/25	-10/50/46	-14/50/33
35	-02/50/88	03/50/82	32/50/02	13/50/35	-11/50/44	-14/50/31
36	-07/50/60	04/50/78	-10/50/49	03/50/82	- - - -	14/50/32

[a] See Table 30 for footnotes a, b, c.

TABLE 35

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the U.S. Texas SER[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	21/50/13	14/50/31	16/50/25	14/50/32	12/50/39	001/50/99
16	17/50/22	15/50/24	25/50/07	19/50/17	-06/50/69	10/50/46
17	08/50/57	01/50/95	-08/50/57	-07/50/60	-12/50/41	36/50/008
18	-19/50/17	-11/50/45	02/50/91	-29/50/04	35/50/01	-29/50/03
19	-12/50/40	-15/50/30	-25/50/07	-15/50/30	-17/50/23	-001/50/99
20	15/50/29	-02/50/90	20/50/16	21/50/13	05/50/73	-13/50/34
21	02/50/88	-18/50/21	15/50/29	15/50/28	-32/50/02	29/50/03
22	-03/50/82	-15/50/20	26/50/06	-05/50/74	-18/50/20	24/50/09
23	10/50/48	-10/50/49	23/50/10	15/50/28	-08/50/57	14/50/31
24	-08/50/56	-20/50/16	-16/50/26	-24/50/08	-05/50/70	14/50/33
25	-20/50/14	01/50/95	16/50/24	31/50/02	-01/50/94	22/50/11
26	07/50/64	18/50/19	12/50/38	12/50/39	02/50/90	-04/50/77
27	-04/50/78	36/50/009	50/50/005	21/50/14	06/50/67	-04/50/78
28	10/50/48	16/50/27	03/50/81	19/50/17	06/50/69	10/50/49
29	01/50/92	06/50/65	03/50/85	-11/50/46	-15/50/29	-12/50/39
30	-09/50/51	-21/50/12	-14/50/34	-16/50/26	-22/50/11	01/50/94
31	-01/50/96	-01/50/94	-09/50/52	-06/50/66	04/50/79	-06/50/69
32	-11/50/45	-03/50/85	-04/50/78	-03/50/85	14/50/31	32/50/03
33	08/50/56	07/50/61	-05/50/74	05/50/72	21/50/13	-20/50/16
34	-01/50/92	28/50/04	04/50/80	-01/50/97	-19/50/17	-08/50/59
35	-04/50/77	-14/50/33	-16/50/27	01/50/96	-34/50/01	16/50/25
36	12/50/41	13/50/34	-19/50/19	-06/50/67	-13/50/35	32/50/02

[a]See Table 30 for footnotes a, b, c.

Table 36

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor[b] Variables for the Colombia RST Sample

Var. No.	ABS-MR 1-Stereo.	2-Norm.	3-Moral	4-Hypo.	5-Feel	6-Action
15	02/401/62	01/401/81	09/401/05	02/401/74	03/401/49	-01/401/89
16	-01/398/77	07/398/17	13/398/01	03/398/49	08/398/12	05/398/30
17	02/399/74	08/399/09	10/399/05	16/399/001	04/399/43	06/399/22
18	04/348/41	03/348/64	07/348/18	16/348/002	04/348/41	13/348/01
19	15/327/006	07/327/23	05/327/33	25/327/0005	11/327/05	01/327/83
20	-02/350/70	04/350/51	06/350/27	15/350/004	19/350/0005	14/350/01
21	01/371/88	13/371/01	14/371/006	15/371/005	17/371/001	22/371/0005
22	01/341/80	05/341/40	10/341/05	19/341/001	01/341/92	18/341/001
23	19/377/0005	25/377/0005	21/377/0005	40/377/0005	12/377/01	37/377/0005
24	- - -	-01/401/92	-02/401/64	-10/401/03	-04/401/36	11/401/03
25	02/364/74	-08/364/11	13/364/01	-03/364/52	02/364/65	05/364/31
26	-03/402/57	08/402/10	-10/402/84	-03/402/84	-03/402/49	04/402/43
27	-03/400/51	05/400/28	01/400/82	-03/400/58	-07/400/17	-07/400/19
28	01/400/94	10/400/05	06/400/25	10/400/05	02/400/64	01/400/95
29	-02/398/71	01/398/80	09/398/08	10/398/05	-04/398/44	06/398/20
30	-01/399/84	-06/399/24	15/399/002	-10/399/04	-01/399/89	-07/399/16
31	09/394/06	01/394/96	08/394/12	-11/394/03	-09/394/08	04/394/48
32	05/398/32	13/398/01	11/398/02	-01/398/82	-06/398/21	-01/398/79
33	05/397/35	-01/397/85	-01/397/79	13/397/01	05/397/35	04/397/45
34	-08/400/09	-03/400/61	09/400/07	-08/400/11	01/400/78	08/400/10
35	-03/399/56	-02/399/71	04/399/41	-10/399/05	-01/399/78	10/399/05
36	-02/387/75	03/387/54	02/387/71	04/387/49	01/387/77	-13/387/01

[a]See Table 30 for footnotes a and b.

[c]RST=Regular School Teachers.

TABLE 37

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Germany RST[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	09/74/43	14/74/23	04/74/73	12/74/30	19/74/09	23/74/04
16	-07/74/56	-06/74/60	06/74/58	06/74/60	-10/74/39	11/74/34
17	07/74/55	-04/74/73	-16/74/17	-15/74/19	-12/74/30	-21/74/07
18	17/74/15	-001/74/99	14/74/21	12/74/31	18/74/12	39/74/001
19	-06/74/61	-24/74/03	-11/74/34	-05/74/66	-13/74/27	-01/74/90
20	06/73/61	04/73/71	-26/73/02	-06/73/59	06/73/59	18/73/13
21	15/74/19	-17/74/14	04/74/74	20/74/08	01/74/92	13/74/0005
22	21/74/06	-01/74/93	14/74/22	12/74/30	28/74/01	42/74/0005
23	29/74/01	21/74/07	19/74/10	50/74/0005	47/74/0005	38/74/001
24	05/74/67	18/74/12	-29/74/01	12/74/29	43/74/0005	45/74/0005
25	-01/74/91	-16/74/18	-21/74/07	-02/74/83	-04/74/74	08/74/50
26	-18/74/12	10/74/40	-15/74/18	-03/74/78	-12/74/30	-12/74/31
27	-12/73/29	-05/73/65	-18/73/12	-003/73/98	-05/73/69	-03/73/81
28	-11/74/35	-07/74/55	20/74/07	12/74/29	-03/74/80	01/74/93
29	-21/74/06	-11/74/33	12/74/30	05/74/64	06/74/60	04/74/75
30	-17/73/15	-03/73/78	-17/73/13	-33/73/004	-20/73/08	-12/73/31
31	07/74/55	06/74/61	17/74/15	08/74/51	08/74/52	09/74/45
32	-15/74/21	-16/74/17	01/74/92	07/74/53	-01/74/96	06/74/59
33	08/74/49	17/74/14	-01/74/93	-05/74/67	11/74/36	-03/74/80
34	03/74/78	05/74/65	01/74/93	06/74/60	22/74/05	04/74/70
35	01/73/96	01/73/90	03/73/82	12/73/30	23/73/04	10/73/38
36	-02/74/88	04/74/76	06/74/62	-24/74/03	-04/74/75	-19/74/10

[a] See Table 30 for footnotes a and b.

[c] RST=Regular School Teachers

Table 38

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Kentucky RST[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-08/54/57	-03/54/83	09/54/51	06/54/66	13/54/33	-15/54/27
16	-03/54/82	-04/54/78	05/54/74	12/54/37	-01/54/96	-23/54/08
17	09/53/52	24/53/08	01/53/92	17/53/20	-02/53/89	-08/53/55
18	-36/53/006	-18/53/19	13/53/35	19/53/17	09/53/53	18/53/19
19	22/52/11	01/52/91	-11/52/41	-17/52/22	05/52/70	-05/52/74
20	-09/53/53	41/53/002	25/53/19	18/53/19	36/53/007	38/53/004
21	-08/53/58	35/53/009	15/53/26	21/53/13	33/53/01	40/53/003
22	-21/53/13	16/53/23	18/53/19	25/53/06	17/53/22	33/53/01
23	-22/53/10	15/53/23	22/53/11	29/53/02	24/53/08	27/53/04
24	-14/54/29	02/54/90	-07/54/60	-05/54/73	002/54/98	12/54/36
25	-22/54/11	-09/54/50	04/54/77	08/54/56	-10/54/48	-30/54/02
26	-14/54/28	002/54/98	05/54/69	04/54/74	07/54/61	-15/54/26
27	-11/52/42	-06/52/67	-08/52/55	01/52/94	-06/52/65	-05/52/74
28	-05/54/71	-17/54/22	07/54/61	14/54/30	21/54/11	-11/54/43
29	-23/54/09	-34/54/01	-01/54/94	08/54/55	08/54/56	12/54/38
30	05/53/17	-06/53/67	02/53/88	-14/53/31	-09/53/50	-33/53/01
31	-18/54/19	-20/54/14	10/54/45	08/54/55	-07/54/63	-18/54/18
32	13/54/32	20/54/13	-03/54/80	-22/54/09	03/54/81	10/54/44
33	-06/54/65	11/54/41	-01/54/91	-07/54/60	15/54/28	-10/54/45
34	-11/54/43	-22/54/10	-09/54/49	11/54/43	-07/54/61	-21/54/13
35	17/54/22	-04/54/78	-04/54/78	05/54/73	13/54/33	05/54/72
36	-03/53/84	-05/53/73	-18/53/19	-21/53/12	-13/53/35	-28/53/03

[a]See Table 30 for footnotes a and b.

[c]RST=Regular School Teachers.

Table 39

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Texas RST[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-57/48/.0005	05/48/73	42/48/.002	-04/48/80	-23/48/11	-47/48/.001
16	-42/48/.002	14/48/34	50/48/.0005	21/48/14	-10/48/51	-27/48/.06
17	-52/48/.000	-01/48/97	40/48/.004	16/48/28	-14/48/33	-52/48/.0005
18	12/48/39	-16/48/26	02/48/87	08/48/58	-15/48/29	14/48/34
19	-20/48/16	-05/48/71	07/48/62	-19/48/19	-20/48/16	-12/48/42
20	27/48/.05	34/48/.01	-01/48/94	-02/48/87	-23/48/10	18/48/20
21	25/48/07	29/48/.03	-03/48/85	-08/48/59	-07/48/63	04/48/76
22	19/48/19	01/48/95	-10/48/50	-04/48/77	-08/48/57	08/48/56
23	06/48/66	004/48/97	24/48/08	21/48/14	-004/48/98	16/48/28
24	13/48/38	31/48/.02	-10/48/49	-03/48/85	08/48/60	22/48/12
25	24/48/09	08/48/56	09/48/53	-10/48/49	13/48/38	08/48/58
26	-04/48/80	16/48/26	30/48/.03	51/48/.0005	39/48/.005	22/48/13
27	22/48/12	14/48/35	14/48/31	15/48/29	22/48/11	07/48/11
28	11/48/45	-23/48/10	-26/48/06	-02/48/88	-06/48/68	15/48/31
29	- - -	-16/48/27	15/48/29	-13/48/35	-01/48/97	-09/48/55
30	-16/48/27	-03/48/85	32/48/.02	-02/48/86	-19/48/18	-20/48/16
31	19/48/18	-03/48/83	-02/48/89	05/48/74	26/48/06	-08/48/59
32	-22/48/12	18/48/21	19/48/19	-18/48/20	-26/48/06	-19/48/17
33	-10/48/49	-20/48/15	38/48/.007	20/48/16	14/48/34	01/48/94
34	11/48/43	-10/48/49	04/48/78	08/48/58	30/48/.03	09/48/55
35	03/48/86	-11/48/45	-02/48/90	13/48/36	22/48/13	05/48/71
36	-10/48/48	-11/48/45	-05/48/71	15/48/29	10/48/50	-09/48/54

[a]See Table 30 for footnotes a and b.

[c]RST=Regular School Teachers.

TABLE 40

Sample Sizes Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Colombia PMR[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	11/99/27	17/99/09	19/99/06	16/99/10	17/99/09	14/99/66
16	13/100/20	20/100/04	28/100/004	17/100/09	18/100/06	19/100/06
17	17/100/09	18/100/07	07/100/45	-02/100/80	03/100/75	10/100/30
18	-09/92/40	08/92/45	-19/92/06	-03/92/77	-12/92/23	05/92/66
19	13/89/21	04/89/68	23/89/02	06/89/57	-02/89/87	04/89/73
20	02/91/87	01/91/92	-08/91/44	13/91/21	04/91/69	-16/91/11
21	-10/92/33	05/92/64	-16/92/12	03/92/79	-01/92/97	04/92/69
22	-11/92/29	-004/92/97	-09/92/39	06/92/58	-10/92/34	04/92/73
23	04/95/72	19/95/06	-05/95/66	26/95/009	14/95/18	08/95/46
24	-04/102/69	03/102/77	02/102/87	12/102/24	09/102/34	11/102/25
25	09/94/38	-04/94/68	-03/94/75	18/94/07	06/94/57	-05/94/64
26	03/99/80	09/99/39	03/99/77	11/99/28	08/99/43	07/99/49
27	06/100/52	20/100/04	-03/100/32	10/100/32	07/100/48	08/100/44
28	09/100/36	16/100/10	04/100/68	15/100/12	09/100/36	06/100/53
29	-06/101/57	-03/101/75	-16/101/11	10/101/34	-10/101/31	13/101/17
30	-20/102/03	-06/102/52	-21/102/03	02/102/87	-12/102/22	-16/102/10
31	03/100/77	14/100/14	-01/100/93	14/100/15	-10/100/32	-01/100/94
32	05/100/65	07/100/51	01/100/89	03/100/67	07/100/49	04/100/67
33	-08/95/41	-02/95/82	-07/95/51	11/95/28	-05/95/62	-13/95/21
34	20/99/05	20/99/05	05/99/60	28/99/005	08/99/43	14/99/16
35	22/100/02	26/100/009	04/100/66	25/100/01	15/100/14	12/100/24
36	05/96/61	08/96/43	-04/96/69	03/96/73	06/96/53	-12/96/23

[a]See Table 30 for footnotes a and b.

[c]PMR=Parents of Mentally Retarded

TABLE 41

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Germany PMR[c] Sample

Var. No.	ABS-MR Levels: 1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	12/144/16	03/144/74	15/144/07	-05/144/53	11/144/18	12/144/15
16	-08/144/33	-04/144/63	17/144/04	-13/144/13	-003/144/96	01/144/89
17	001/144/98	-01/144/94	02/144/83	01/144/90	-24/144/003	002/144/98
18	-04/138/60	-11/138/20	-004/138/96	19/138/02	-04/138/62	15/138/07
19	11/138/21	16/138/05	06/138/46	-06/138/48	03/138/73	05/138/56
20	01/131/88	-09/131/30	-05/131/51	-02/131/83	14/131/12	11/131/19
21	01/137/98	-05/137/52	-01/137/98	-08/137/34	02/137/84	29/137/0005
22	-07/135/40	-12/135/17	-04/135/60	15/135/09	-03/135/68	20/135/02
23	02/139/80	-09/139/31	06/139/51	16/139/06	01/139/91	16/139/06
24	-12/144/15	-20/144/01	-15/144/07	-03/144/73	-06/144/45	16/144/05
25	-35/143/0005	-07/143/40	01/143/88	-07/143/38	-11/143/20	10/143/24
26	03/144/69	10/144/21	09/144/30	003/144/96	05/144/52	-06/144/49
27	-10/144/24	07/144/40	04/144/62	09/144/25	-14/144/09	02/144/83
28	16/144/05	10/144/24	07/144/43	05/144/55	---------	07/144/38
29	02/144/83	-02/144/84	15/144/07	13/144/12	-04/144/62	17/144/04
30	-06/144/44	-08/144/35	25/144/003	-02/144/82	-10/144/22	-07/144/41
31	-12/144/14	-08/144/35	06/144/50	03/144/75	00/144/98	15/144/07
32	07/144/43	-003/144/96	-001/144/98	09/144/27	-05/144/52	01/144/94
33	-12/142/17	-10/142/22	-06/142/49	-02/142/78	-24/142/004	-04/142/64
34	-02/143/79	-08/143/34	06/143/44	10/143/21	-15/143/07	-003/143/97
35	01/144/91	-02/144/86	07/144/42	06/144/50	-19/144/01	08/144/36
36	-16/143/04	-01/143/95	16/143/04	19/143/02	-11/143/17	02/143/80

[a]See Table 30 for footnotes a and b.

[c]PMR=Parents of Mentally Retarded.

TABLE 42

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Israel PMR[c] Sample

Var. No.	ABS-MR Levels 1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	82/12/0005	04/12/88	58/12/03	52/12/05	01/12/97	25/12/38
16	54/12/04	-24/12/41	36/12/20	20/12/48	61/12/02	-02/12/95
17	-38/12/17	-13/12/65	-47/12/08	-17/12/55	-11/12/70	-41/12/14
18	42/12/13	37/12/19	61/12/02	77/12/001	36/12/20	68/12/008
19	-24/9/47	-19/9/57	-03/9/92	-26/9/43	-31/9/35	-22/9/51
20	---------	---------	---------	---------	---------	---------
21	13/9/70	60/9/05	06/9/85	32/9/34	37/9/25	52/9/09
22	19/11/54	17/11/59	39/11/18	59/11/03	41/11/16	64/11/02
23	-20/8/57	41/8/24	-05/8/89	56/8/09	35/8/31	61/8/06
24	-11/12/70	18/12/53	60/12/02	30/12/29	13/12/65	38/12/18
25	-38/11/19	-18/11/56	03/11/91	-07/11/81	09/11/71	-28/11/35
26	42/12/13	44/12/11	---------	15/12/61	54/12/04	61/12/02
27	52/12/05	-05/12/86	18/12/54	38/12/18	52/12/05	13/12/65
28	-17/12/55	-20/12/49	21/12/48	35/12/22	-09/12/75	-26/12/36
29	03/12/92	02/12/94	-08/12/78	-20/12/49	13/12/64	02/12/94
30	-20/12/49	-42/12/14	---------	-09/12/75	36/12/21	-23/12/42
31	53/12/04	27/12/34	40/12/16	39/12/16	---------	24/12/40
32	-12/12/67	-37/12/18	-06/12/85	-19/12/50	-14/12/63	-29/12/32
33	-23/10/48	-45/10/13	35/10/26	45/10/14	-32/10/31	-16/10/62
34	-16/12/58	-02/12/93	31/12/28	37/12/19	14/12/64	34/12/23
35	-24/12/41	02/12/95	68/12/007	63/12/01	-13/12/66	40/12/15
36	-07/12/80	33/12/26	-32/12/26	-14/12/64	-31/12/27	24/12/41

[a]See Table 30 for footnotes a and b.

[c]PMR=Parents of Mentally Retarded.

Table 43

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Yugoslav PMR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm.	3-Moral	4-Hypo.	5-Feel	6-Action
15	20/50/11	-12/50/36	03/50/85	20/50/16	19/50/17	07/50/64
16	14/50/31	18/50/19	17/50/23	47/50/001	28/50/04	12/50/39
17	-10/50/50	05/50/70	-31/50/02	-11/50/42	-40/50/003	-11/50/45
18	11/50/45	-02/50/88	-18/50/19	06/50/65	04/50/77	20/50/16
19	-28/50/04	13/50/37	-02/50/90	-17/50/21	-12/50/41	06/50/66
20	-07/50/61	-03/50/81	04/50/80	21/50/13	04/50/76	-02/50/90
21	-13/50/37	03/50/82	13/50/34	05/50/70	07/50/60	-11/50/42
22	21/49/13	-15/49/29	-01/49/97	37/49/007	21/49/14	03/49/83
23	10/50/47	07/50/61	13/50/35	07/50/62	03/50/81	-03/50/82
24	04/50/80	-03/50/85	15/50/28	05/50/74	12/50/74	-09/50/53
25	09/50/54	-04/50/79	-06/50/64	18/50/20	22/50/12	-15/50/28
26	03/50/85	-02/50/89	24/50/08	22/50/11	48/50/0005	09/50/51
27	01/50/95	25/50/07	04/50/76	40/50/004	36/50/01	20/50/14
28	36/50/01	12/50/41	08/50/57	12/50/40	11/50/42	-01/50/97
29	-15/50/29	-04/50/78	28/50/04	34/50/01	24/50/08	-27/50/05
30	-03/50/85	39/50/004	19/50/18	14/50/33	23/50/10	-46/50/001
31	05/49/70	-04/49/75	15/49/28	09/49/54	19/49/19	-17/49/23
32	18/50/20	09/50/54	31/50/02	28/50/04	18/50/19	-16/50/26
33	-01/49/97	-13/49/35	03/49/85	09/49/51	-27/49/05	-12/49/40
34	-14/50/32	-07/50/64	43/50/001	30/50/03	11/50/43	-13/50/37
35	16/50/25	05/50/74	22/50/11	24/50/08	18/50/21	-01/50/97
36	25/50/07	13/50/36	07/50/61	-01/50/94	08/50/59	-01/50/93

[a]See Table 30 for footnotes a and b.

[c]PMR=Parents of Mentally Retarded.

Table 44

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Michigan PMR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm.	3-Moral	4-Hypo.	5-Feel	6-Action
15	-11/41/48	-14/41/38	-11/41/48	-04/41/81	04/41/81	01/41/98
16	-14/41/36	-13/41/42	24/41/12	23/41/13	10/41/53	33/41/03
17	-03/41/87	20/41/20	31/41/04	14/41/35	15/41/34	23/41/13
18	-04/40/79	-25/40/11	21/40/17	05/40/76	-08/40/61	31/40/04
19	-03/41/86	08/41/59	08/41/60	11/41/49	34/41/02	-06/41/72
20	-13/39/40	05/39/75	20/39/22	-03/39/86	38/39/01	24/39/13
21	11/40/50	28/40/07	27/40/09	12/40/46	25/40/10	--------
22	-13/40/41	-20/40/20	20/40/19	15/40/33	-06/40/68	34/40/02
23	-02/39/90	01/39/95	07/39/68	30/39/05	-04/39/78	26/39/08
24	02/41/91	-25/41/10	-26/41/09	-06/41/69	-10/41/50	12/41/44
25	07/41/64	37/41/01	34/41/02	26/41/08	11/41/48	11/41/46
26	24/41/12	11/ 4/49	16/41/30	04/41/82	-10/41/50	-02/41/92
27	14/41/38	22/41/15	-02/41/90	04/41/79	-17/41/27	-20/41/20
28	-20/41/20	01/41/96	03/41/85	-03/41/82	20/41/19	-23/41/13
29	07/41/64	-12/41/44	02/41/91	16/41/30	-06/41/69	23/41/13
30	-08/41/59	15/41/33	16/41/30	21/41/17	15/41/33	09/41/55
31	07/41/64	-05/41/74	20/41/19	11/41/46	-11/41/48	09/41/58
32	25/41/11	13/41/39	-09/41/58	-07/41/66	-08/41/63	-07/41/63
33	-03/41/83	18/41/24	28/41/06	25/41/11	35/41/02	22/41/16
34	-07/41/65	07/41/66	04/41/78	12/41/43	06/41/71	12/41/44
35	-12/41/44	04/41/80	-07/41/65	-01/41/93	-09/41/56	-10/41/52
36	01/40/96	-25/40/11	-14/40/38	-36/40/02	-30/40/05	-13/40/39

[a]See Table 30 for footnotes a and b.

[c]PMR=Parents of Mentally Retarded.

Table 45

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Texas PMR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-15/49/ 29	-15/49/28	-20/49/16	-05/49/74	01/49/97	-03/49/85
16	10/49/50	05/49/75	14/49/32	19/49/19	21/49/14	-10/49/50
17	10/49/46	-16/49/25	-43/49/002	10/49/46	-03/49/82	12/49/40
18	-07/49/62	-19/49/18	-17/49/22	-26/19/06	03/49/84	-34/49/01
19	-05/49/07	-05/49/70	08/49/59	-05/49/72	-15/49/27	08/49/58
20	09/49/51	26/49/06	11/49/43	-17/49/24	-09/49/52	-14/49/32
21	15/49/30	34/49/01	-09/49/53	06/49/65	-07/49/62	26/49/06
22	-02/49/90	-30/49/03	-28/49/04	-42/49/002	07/49/64	-16/49/25
23	03/49/86	16/49/25	34/49/01	31/49/02	29/49/03	18/49/20
24	-18/49/19	04/49/76	08/49/55	02/49/87	-01/49/96	24/49/09
25	18/49/21	-08/49/56	-05/49/72	11/49/43	08/49/59	-24/49/08
26	-08/49/58	10/49/46	-07/49/61	08/49/56	-08/49/56	01/49/93
27	-19/49/19	-01/49/94	13/49/35	03/49/81	-09/49/54	-17/49/23
28	19/49/18	24/49/09	09/49/53	-16/49/26	20/49/16	16/49/26
29	-03/49/85	16/49/24	-03/49/81	-04/49/81	09/49/52	02/49/89
30	20/49/16	04/49/78	10/49/49	-07/49/64	11/49/45	-38/40/007
31	-15/49/28	-17/49/23	-01/49/94	-13/49/35	23/49/10	06/49/69
32	06/49/67	05/49/72	-01/49/97	02/49/88	-25/49/07	-22/49/11
33	36/49/009	13/49/35	002/49/98	-10/49/50	30/49/03	04/49/79
34	13/49/35	-03/49/83	-03/49/84	21/49/13	28/49/04	-09/49/51
35	06/49/70	-09/49/54	-04/49/77	30/49/03	09/49/55	-08/49/58
36	-26/49/06	-24/49/08	-10/49/46	-06/49/69	-01/49/96	-04/49/76

[a]See Table 30 for footnotes a and b.

[b]PMR=Parents of Mentally Retarded.

Table 46

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Brazil MAN[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	90/30/0005	86/30/0005	92/30/0005	-49/30/004	91/30/0005	94/30/0005
16	95/30/0005	93/30/0005	92/30/0005	-61/30/0005	95/30/0005	96/30/0005
17	-44/30/01	-42/30/01	-46/30/009	21/30/24	-49/30/005	-42/30/01
18	---------	-42/30/01	-46/30/009	21/30/24	-49/30/005	-42/30/01
19	---------	-42/30/01	-46/30/009	21/30/24	-49/30/005	-42/30/01
20	-21/30/25	-21/30/25	-25/30/16	15/30/42	-24/30/18	-27/30/14
21	-45/30/01	-46/30/009	-56/30/001	13/30/46	-51/30/003	-58/30/0005
22	71/30/0005	71/30/0005	83/30/0005	-33/30/06	70/30/0005	78/30/0005
23	58/30/001	69/30/0005	65/30/0005	-29/30/11	63/30/0005	62/30/0005
24	90/30/0005	90/30/0005	85/30/0005	-69/30/0005	88/30/0005	92/30/0005
25	95/30/0005	83/30/0005	94/30/0005	-63/30/0005	91/30/0005	97/30/0005
26	-93/30/0005	-81/30/0005	-83/30/0005	64/30/0005	-89/30/0005	-90/30/0005
27	-56/30/001	-46/30/008	-43/30/01	54/30/001	-48/30/006	-60/30/0005
28	85/30/0005	87/30/0005	89/30/0005	-43/30/01	89/30/0005	89/30/0005
29	89/30/0005	86/30/0005	91/30/0005	-35/30/04	94/30/0005	87/30/0005
30	90/30/0005	91/30/0005	95/30/0005	-46/30/009	93/30/0005	92/30/0005
31	74/30/0005	81/30/0005	82/30/0005	-38/30/03	80/30/0005	81/30/0005
32	90/30/0005	87/30/0005	95/30/0005	-46/30/008	91/30/0005	94/30/0005
33	97/30/0005	91/30/0005	89/30/0005	-68/30/0005	93/30/0005	95/30/0005
34	90/30/0005	85/30/0005	94/30/0005	-47/30/006	88/30/0005	94/30/0005
35	85/30/0005	76/30/0005	86/30/0005	-42/30/01	86/30/0005	88/30/0005
36	69/30/0005	75/30/0005	82/30/0005	-22/30/22	74/30/0005	76/30/0005

[a]See Table 30 for footnotes a and b.

[b]MAN= Managers

TABLE 47

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the German MAN[c] Sample

Var. No.	ABS-MR Levels 1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	06/83/61	-02/83/89	18/83/09	15/83/16	-10/83/38	16/83/14
16	-17/83/13	-08/83/48	-09/83/40	04/83/74	08/83/48	01/83/90
17	03/82/79	26/82/01	-07/82/51	11/82/31	002/82/98	-12/82/26
18	-03/80/78	-19/80/09	03/80/76	10/80/35	01/80/96	47/80/0005
19	01/81/94	14/81/20	-05/81/65	08/81/45	-07/81/55	-29/81/008
20	-03/82/78	04/82/68	-10/82/38	-04/82/71	24/82/02	22/82/04
21	01/83/94	02/83/84	-02/83/82	-07/83/52	25/83/02	05/83/67
22	-04/83/75	07/83/54	12/83/27	16/83/15	03/83/79	61/83/0005
23	-04/83/74	04/83/73	-07/83/54	02/83/86	07/83/52	45/83/0005
24	-13/83/25	-11/83/32	-09/83/40	05/83/65	30/83/006	02/83/87
25	----------	----------	----------	----------	----------	----------
26	-10/83/38	-09/83/40	15/83/18	09/83/40	-23/83/32	14/83/21
27	02/83/88	-02/83/83	16/83/13	17/83/13	-04/83/74	03/83/75
28	25/83/02	04/83/69	-03/83/76	-20/83/06	-004/83/97	-20/83/06
29	13/83/24	06/83/61	-003/83/97	14/83/20	-19/83/08	12/83/29
30	-23/83/03	-21/83/05	-01/83/96	-21/83/04	03/83/81	-10/83/38
31	02/83/87	02/83/87	-02/83/88	-12/83/28	03/83/80	-02/83/84
32	-11/83/30	-11/83/30	-08/83/44	-002/83/98	-15/83/17	-08/83/48
33	03/83/78	07/83/53	-15/83/16	-12/83/25	-03/83/75	-14/83/20
34	-17/83/12	04/83/71	22/83/04	22/83/04	09/83/42	06/83/58
35	08/83/47	17/88/11	21/83/05	30/83/005	-01/83/91	09/83/43
36	-03/82/77	15/82/17	-02/82/82	-15/82/18	-07/82/51	-03/82/80

[a]See Table 30 for footnotes a and b.

[c]MAN=Managers/Executives

Table 48

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Kentucky MAN[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	18/20/42	-02/20/75	43/20/04	05/20/82	62/20/002	15/19/50
16	-32/20/14	-18/20/41	26/30/24	-13/20/58	07/20/74	45/19/04
17	004/19/98	08/19/73	39/19/08	34/19/13	-18/19/43	-12/19/61
18	-001/19/99	-22/19/33	30/19/19	-01/19/98	-41/19/06	40/19/72
19	-07/19/75	-32/19/15	08/19/74	-22/19/34	18/19/42	12/19/61
20	-11/19/63	-02/19/93	11/19/63	05/19/83	-07/19/76	27/19/23
21	-17/19/45	04/19/85	-05/19/83	12/19/59	-04/19/88	02/19/93
22	-16/19/50	-15/19/51	16/19/50	09/19/68	-19/19/40	56/19/009
23	24/19/22	-15/19/53	26/19/24	32/19/15	29/19/19	37/19/10
24	-03/20/89	20/20/38	-36/20/10	-18/20/42	20/20/37	-003/19/99
25	-41/20/05	-25/20/26	-11/20/63	-21/20/36	-61/20/003	01/19/96
26	-42/20/05	-12/20/59	-55/20/008	-45/20/03	-21/20/36	-24/19/30
27	09/20/70	-001/20/99	-06/20/78	-14/20/52	-08/20/74	001/19/95
28	21/20/35	03/20/89	-18/20/42	-08/20/72	48/20/02	-06/19/80
29	24/20/27	-25/20/26	22/20/33	35/20/11	17/20/43	06/19/80
30	-13/20/57	-20/20/38	22/20/32	-16/20/46	-26/20/24	60/19/004
31	-31/20/57	-14/20/53	38/20/07	-06/20/77	-14/20/52	22/19/33
32	17/20/44	-25/20/25	34/20/12	26/20/24	31/20/15	-08/19/73
33	36/19/10	13/19/56	22/19/34	24/19/29	13/19/56	45/19/04
34	-31/20/16	04/20/85	-06/20/80	-17/20/46	-37/20/09	-08/19/74
35	-19/20/38	24/20/28	16/20/48	-22/20/33	11/20/62	-05/19/84
36	-20/20/38	-35/20/11	-11/20/63	-11/20/62	-45/20/03	29/19/19

[a]See Table 30 for footnotes a and b.

[c]MAN=Managers/Executives

TABLE 49

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Brazil PNR[c] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	46/29/.009	63/29/.0005	76/29/.0005	92/29/.0005	77/29/.0005	28/29/12
16	86/29/.0005	94/29/.0005	96/29/.0005	74/29/.0005	90/29/.0005	76/29/.0005
17	-28/29/12	-31/29/08	-26/29/16	05/29/81	-31/29/08	-19/29/31
18	-------	-------	-------	-------	-------	-------
19	51/29/.003	60/29/.0005	76/29/.0005	91/29/.0005	72/29/.0005	39/03/.0005
20	-------	-------	-------	-------	-------	-------
21	90/29/.0005	71/29/.0005	65/29/.0005	13/29/48	45/29/.01	94/29/.0005
22	85/29/.0005	73/29/.0005	64/29/.0005	15/29/41	51/29/.004	81/29/.0005
23	81/29/.0005	86/29/.0005	86/29/.0005	67/29/.0005	79/29/.0005	72/29/.0005
24	71/29/.0005	8/29/.0005	82/29/.0005	68/29/.0005	77/29/.0005	65/29/.0005
25	79/29/.0005	82/29/.0005	87/29/.0005	71/29/.0005	85/29/.0005	63/29/.0005
26	17/29/35	29/29/12	42/29/.01	62/29/.0005	41/29/.02	10/29/59
27	29/29/11	34/29/.05	46/29/.01	61/29/.0005	32/29/.08	25/29/17
28	78/29/.0005	81/29/.0005	89/29/.0005	80/29/.0005	78/29/.0005	82/29/.0005
29	77/29/.0005	86/29/.0005	95/29/.0005	82/29/.0005	93/29/.0005	64/29/.0005
30	87/29/.0005	92/29/.0005	95/29/.0005	72/29/.0005	89/29/.0005	79/29/.0005
31	76/29/.0005	85/29/.0005	82/29/.0005	69/29/.0005	73/29/.0005	71/29/.0005
32	88/29/.0005	9/29/.0005	96/29/.0005	71/29/.0005	87/29/.0005	75/29/.0005
33	86/29/.0005	80/29/.0005	85/29/.0005	54/29/.003	70/29/.0005	84/29/.0005
34	80/29/.0005	78/29/.0005	88/29/.0005	71/29/.0005	76/29/.0005	69/29/.0005
35	65/29/.0005	63/29/.0005	71/29/.0005	53/29/.002	59/29/.0005	56/29/.001
36	71/29/.0005	83/29/.0005	87/29/.0005	84/39/.0005	80/39/.0005	60/29/.0005

[a]See Table 30 for footnotes a and b.

[c]PNR=Parents of Non-Retarded.

TABLE 50

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Germany PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-10/69/38	-08/69/51	05/69/66	08/69/52	-29/69/01	11/69/35
16	04/69/76	05/69/22	16/69/19	14/69/23	-03/69/79	09/69/44
17	-34/69/004	-06/69/60	03/69/79	02/69/87	-05/69/67	23/69/05
18	-11/65/39	-02/65/87	12/65/31	08/65/54	09/65/47	33/65/002
19	16/63/19	03/63/81	01/63/92	08/63/53	-04/63/73	17/63/17
20	-04/69/72	22/69/06	20/69/09	05/69/67	09/69/46	-02/69/87
21	16/69/17	13/69/26	21/69/07	21/69/08	19/69/10	08/69/50
22	01/69/91	-04/69/75	07/69/59	04/69/73	01/69/94	28/69/01
23	15/69/20	15/69/20	21/69/78	29/69/01	-12/69/31	36/69/002
24	-04/69/77	01/69/93	08/69/48	03/69/79	-16/69/17	21/69/08
25	-06/68/63	-19/68/12	-11/68/35	-10/68/42	-19/68/11	03/68/82
26	04/69/75	26/69/03	19/69/11	17/69/15	06/69/63	-20/69/08
27	-17/69/15	22/69/06	06/69/61	14/69/25	04/69/76	-11/69/34
28	07/69/54	06/69/63	22/69/06	26/69/03	-04/69/76	37/69/002
29	-08/69/50	16/69/18	26/69/03	17/69/15	08/69/52	09/69/44
30	14/69/23	14/69/25	13/69/27	07/69/54	-14/69/25	002/69/98
31	09/69/44	10/69/40	14/69/23	31/69/009	-07/69/54	-04/69/75
32	02/69/89	28/69/01	41/69/0005	28/69/01	08/69/50	-07/69/55
33	05/69/65	-19/69/11	-10/69/42	05/69/67	-04/69/75	27/69/02
34	01/69/94	21/69/07	13/69/28	001/69/99	02/69/90	05/69/66
35	-17/69/15	15/69/21	15/69/20	11/69/35	-14/69/24	-06/69/61
36	-01/67/94	-05/67/67	-01/67/94	07/67/58	-02/67/87	10/67/39

[a]See Table 30 for footnotes a and b.

[c]PNR=Parents of Non-Retarded.

TABLE 51

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and Predictor Variables[b] for the Israel PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo	5-Feel	6-Action
15	-01/43/97	-10/43/52	-03/43/84	-04/43/78	06/43/71	-04/43/80
16	-11/42/48	17/42/26	14/42/38	-07/42/66	-09/42/56	05/42/75
17	-004/43/97	19/43/20	11/43/45	18/43/24	18/43/23	21/43/16
18	-03/33/87	-08/33/63	15/33/38	33/33/05	19/33/28	32/33/06
19	-20/31/26	06/31/74	-14/31/42	-13/31/46	-10/31/57	01/31/93
20	———	———	———	———	———	———
21	-03/33/85	05/33/79	43/33/01	14/33/43	46/33/005	15/33/38
22	-13/33/47	28/33/10	-04/33/82	02/33/91	19/33/27	23/33/18
23	-18/38/26	19/38/23	15/38/35	36/38/02	28/38/08	27/38/09
24	11/44/48	12/44/43	-28/44/06	-08/44/58	21/44/17	32/44/03
25	-17/44/26	10/44/51	22/44/14	13/44/40	-21/44/17	-10/44/49
26	13/44/38	03/44/83	04/44/79	36/44/01	07/44/66	20/44/19
27	-08/42/62	02/42/87	03/42/86	17/42/27	-07/42/63	10/42/50
28	15/42/34	30/42/04	05/42/73	15/42/31	-001/42/97	12/42/45
29	35/44/01	-06/44/54	09/44/54	-09/44/56	-33/44/02	-05/44/76
30	14/43/36	18/43/23	19/43/20	02/43/90	-59/43/0005	-22/43/14
31	12/44/44	06/44/70	02/44/91	-06/44/68	02/44/87	-06/44/70
32	-01/44/97	11/44/48	004/44/98	02/44/92	04/44/80	02/44/91
33	-22/38/16	-25/38/11	13/38/40	-32/38/04	21/38/18	003/38/98
34	02/43/91	-13/43/40	21/43/17	06/43/72	18/43/24	06/43/68
35	-02/43/89	-03/43/87	28/43/06	19/43/22	-04/43/81	17/43/27
36	-04/41/78	22/41/15	-02/41/91	-01/41/95	08/41/62	20/41/19

[a]See Table 30 for footnotes a and b.

[c]PNR=Parents of Non-Retarded.

Table 52

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Yugoslav PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-23/49/10	-23/49/10	08/49/58	-34/49/01	-01/49/94	-22/49/11
16	04/49/76	05/49/74	27/49/05	-08/49/59	-04/49/77	-06/49/67
17	31/49/02	05/49/71	-05/49/71	04/49/79	21/49/12	-03/49/83
18	-14/26/46	10/26/60	27/26/16	14/26/46	-36/26/05	46/26/01
19	06/26/74	-02/26/90	-26/26/18	15/26/45	10/26/62	-21/26/28
20	-28/26/14	24/26/21	46/26/01	20/26/31	-27/26/19	35/26/07
21	-21/41/17	03/41/84	07/41/66	24/41/12	-08/41/60	19/41/22
22	-04/46/79	24/46/10	34/46/01	57/46/0005	-22/46/14	54/46/0005
23	-28/49/04	-17/49/22	05/49/74	29/49/03	11/49/42	36/49/01
24	-33/49/01	07/49/60	-08/49/57	03/49/81	10/49/49	-17/49/23
25	27/49/05	16/49/27	13/49/36	01/49/99	-26/49/06	27/49/05
26	-12/49/41	-23/49/10	-24/49/09	-12/49/39	21/49/13	-17/49/24
27	17/49/23	-23/49/10	-10/49/50	-29/49/04	22/49/11	-26/49/06
28	-16/49/26	-14/49/33	-20/49/16	-11/49/43	19/49/18	-18/49/20
29	-06/48/69	04/48/79	15/48/28	17/48/25	16/48/26	10/48/48
30	20/49/16	20/49/15	33/49/01	-13/49/36	-43/49/001	10/49/47
31	18/49/22	-04/49/76	07/49/60	-04/49/79	13/49/35	-04/49/77
32	05/48/72	20/48/15	29/48/04	-02/48/91	-32/48/02	06/48/68
33	-21/49/13	14/49/31	10/49/49	21/49/13	-11/49/45	13/49/37
34	-12/48/41	-18/48/21	-10/48/50	-20/48/10	16/48/27	04/48/76
35	-08/48/57	-04/48/77	10/48/47	-09/48/55	23/48/10	14/48/33
36	23/48/11	-07/48/60	23/48/10	-26/48/06	-13/48/38	-05/48/72

[a]See Table 30 for footnotes a and b.

[b]PNR=Parents of Non-Retarded.

Table 53

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Michigan PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	07/33/69	25/33/14	24/33/16	39/33/02	26/33/13	28/33/10
16	08/33/63	14/33/39	01/33/99	03/33/85	01/33/94	-01/33/95
17	06/33/71	08/33/66	26/33/12	21/33/23	31/33/07	30/33/08
18	-26/33/12	-28/22/10	21/33/22	06/33/72	56/33/0005	30/33/08
19	--------	03/32/88	-05/32/78	05/32/77	01/32/96	-31/32/07
20	-64/32/0005	-26/32/13	32/32/06	39/32/02	58/32/0005	44/32/009
21	-52/33/001	-11/33/53	47/33/005	40/33/01	60/33/0005	58/33/0005
22	-18/33/31	-20/33/25	-01/33/99	19/33/28	66/33/0005	54/33/001
23	-47/32/005	-19/32/28	28/32/10	49/32/003	54/32/001	75/32/0005
24	-26/33/13	11/33/53	-05/33/75	-27/33/11	32/33/05	37/33/02
25	06/33/75	12/33/49	21/33/23	05/33/76	42/33/01	39/33/01
26	-22/33/21	-05/33/77	-05/33/76	-14/33/42	16/33/33	31/33/06
27	-37/33/02	-08/33/64	-03/33/86	-22/33/20	08/33/61	32/33/06
28	-26/33/13	-19/33/28	32/33/06	41/33/01	34/33/04	17/33/33
29	-04/33/82	-11/33/54	18/33/29	-28/33/10	-14/33/42	10/33/57
30	07/33/69	03/33/86	-11/33/51	-30/33/07	03/33/86	18/33/29
31	14/33/44	16/33/35	-17/33/34	-37/33/02	14/33/41	20/33/24
32	-37/33/03	-14/33/43	21/33/22	31/33/07	15/33/39	24/33/16
33	09/33/61	02/33/92	-15/33/39	18/33/30	12/33/49	-04/33/82
34	-04/33/81	17/33/33	12/33/49	15/33/40	01/33/99	-11/33/53
35	-12/33/50	15/33/38	35/33/04	09/33/59	02/33/89	-11/33/49
36	20/33/24	-08/33/65	-25/33/14	-09/33/59	-19/33/26	03/33/87

[a]See Table 30 for footnotes a and b.

[c]PNR=Parents of Non-Retarded.

Table 54

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Texas PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	03/76/76	14/76/23	12/76/28	19/76/10	-02/76/88	23/76/04
16	05/76/69	-14/76/23	04/76/75	09/76/43	10/76/37	01/76/94
17	-15/76/20	-25/76/03	19/76/08	18/76/11	-09/76/43	08/76/47
18	08/76/46	-08/76/47	-004/76/97	14/76/23	08/76/50	25/76/02
19	45/75/0005	18/75/11	07/75/56	16/75/15	-02/75/85	-02/75/85
20	10/76/38	-10/76/39	.03/76/80	15/76/19	-06/76/58	28/76/01
21	-03/76/81	06/76/60	10/76/40	21/76/06	-04/76/76	29/76/01
22	13/74/27	-10/74/39	02/74/83	20/74/08	16/74/16	37/74/001
23	15/76/20	10/76/40	36/76/001	35/76/002	25/76/02	44/76/0005
24	06/76/62	-01/76/94	04/76/71	04/76/74	13/76/26	-05/76/66
25	03/76/80	01/76/96	28/76/01	24/76/03	08/76/47	30/76/008
26	-25/75/03	-11/75/36	04/75/73	-03/75/00	05/75/67	17/75/13
27	-27/76/01	-12/76/28	19/76/10	14/76/21	02/76/84	28/76/01
28	15/76/18	15/76/20	14/76/22	-02/76/83	08/76/48	16/76/17
29	-15/76/18	-03/76/81	30/76/008	17/76/14	-05/76/63	20/76/08
30	04/76/74	06/76/58	13/76/26	22/76/05	-11/76/34	-04/76/72
31	20/76/08	16/76/17	14/76/21	11/76/34	19/76/10	08/76/49
32	03/76/78	-05/76/68	-01/76/39	-10/76/39	17/76/14	01/76/95
33	13/73/27	-10/73/38	13/73/28	03/73/82	-10/73/37	-07/73/57
34	09/76/43	10/76/38	17/76/13	03/76/79	09/76/41	08/76/50
35	-01/76/95	-08/76/50	11/76/34	01/76/90	07/76/55	14/76/21
36	-23/76/03	-12/76/31	-02/76/83	11/76/35	-04/76/76	03/76/78

[a]See Table 30 for footnotes a and b.

[b]PNR=Parents of Non-Retarded.

TABLE 55

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total SER[c] Sample.

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-39/383/.0005	12/383/.01	36/383/.0005	18/384/.0005	09/385/07	-01/384/85
16	-35/381/.0005	05/381/28	33/381/.0005	15/382/.004	03/382/51	-01/382/95
17	-58/38/.0005	01/38/96	49/380/.0005	15/381/.003	-30/381/.005	-31/381/.0005
18	05/347/32	-13/346/.01	-05/346/40	10/347/86	01/347/82	-02/345/69
19	05/358/34	08/357/13	06/357/30	04/35/45	04/358/44	03/356/55
20	-03/299/56	-23/299/.0005	-01/299/82	20/299/.0005	-01/299/95	-21/299/.0005
21	-16/364/.003	-09/363/10	08/363/12	12/364/.01	12/364/.02	-01/362/98
22	-03/369/62	-14/368/.009	02/368/72	03/369/54	-02/369/76	-07/367/19
23	01/373/82	-16/372/.002	-03/372/53	11/373/.03	09/373/07	07/371/19
24	07/385/16	-05/385/28	-10/385/.05	-01/386/81	-08/386/11	-01/384/85
25	-20/374/.0005	-18/373/.001	09/373/07	25/374/.0005	01/374/83	-18/372/.0005
26	04/383/47	04/382/47	-04/382/43	01/38/85	10/383/.05	13/382/.01
27	01/384/96	01/383/79	04/383/49	01/384/80	13/384/.009	04/382/43
28	-06/379/22	-22/378/.0005	-01/378/89	15/379/.004	-06/379/22	-13/378/.01
29	12/379/.01	07/378/14	02/378/68	02/379/58	02/379/58	-01/377/85
30	-01/376/77	-10/375/.05	07/375/15	04/376/38	-08/376/11	-21/374/.0005
31	20/378/.0005	13/377/.01	05/377/32	-11/378/.04	-01/378/94	07/376/20
32	18/381/.001	-09/380/.08	-10/380/06	-14/381/.007	-05/381/32	03/379/52
33	-16/368/.001	-10/367/.04	04/367/50	19/368/.0005	-06/368/24	-10/366/.04
34	08/381/11	06/380/23	05/380/33	-05/381/36	-05/381/35	-05/379/31
35	12/383/.01	12/382/.02	08/382/12	-04/383/40	-01/383/91	-03/381/55
36	-03/376/62	05/375/29	11/375/.03	08/376/12	01/376/95	-12/375/.02

[a]See Table 30 for footnotes a and b.

[b]SER=Special education/rehabilitation personnel.

Table 56

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total RST Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-41/1092/0005	-10/1093/0005	23/1093/0005	-02/1093/62	12/1093/0005	-20/1093/0005
16	-46/1092/0005	07/1093/03	29/1093/0005	-07/1093/01	-04/1093/23	-10/1093/001
17	-38/1088/0005	-30/1089/0005	10/1089/001	03/1089/41	07/1089/01	-44/1089/0005
18	-06/1009/04	02/1009/575	06/1009/07	03/1089/40	-01/1009/78	04/1009/20
19	07/984/02	-03/984/29	01/984/95	05/984/15	06/984/04	05/984/09
20	-08/731/01	11/731/003	06/731/09	-05/731/19	-02/731/52	05/731/17
21	-02/984/47	09/984/005	03/984/29	-02/984/61	-01/984/78	08/984/008
22	-06/979/05	04/979/17	06/979/08	01/979/77	02/979/57	05/979/10
23	01/1039/84	12/1039/0005	16/1039/0005	06/1039/06	06/1039/05	12/1039/0005
24	-05/1089/11	-19/1090/0005	-05/1090/12	04/1090/18	13/1090/0005	-12/1090/0005
25	-29/1026/0005	-26/1027/0005	06/1027/06	05/1027/08	04/1027/12	-31/1027/0005
26	04/1090/246	21/1091/0005	-01/1091/71	-11/1091/0005	-10/1091/001	10/1091/001
27	04/1086/19	10/1086/001	-04/1086/18	-09/1086/004	-07/1086/02	08/1086/006
28	-01/1088/69	01/1089/65	05/1089/09	01/1089/81	02/1089/56	03/1089/36
29	14/1086/0005	08/1087/007	-01/1087/70	01/1087/70	03/1087/35	08/1087/007
30	-06/1084/05	-21/1085/0005	-01/1085/72	08/1085/007	04/1085/25	-17/1085/0005
31	08/1078/007	10/1079/001	06/1079/07	01/1079/85	-04/1079/25	06/1079/06
32	05/1085/09	01/1085/80	01/1085/94	07/1085/01	04/1085/18	04/1085/11
33	-05/1086/09	-13/1086/0005	05/1086/09	06/1086/04	08/1086/004	-08/1086/01
34	01/1088/72	-14/1088/0005	01/1088/63	15/1088/0005	13/1088/0005	-02/1088/53
35	05/1081/13	-11/1081/0005	15/1081/0005	11/1081/0005	-02/1081/46	06/1081/05
36	12/1058/0005	-23/1058/0005	-10/1058/002	10/1058/001	10/1058/001	-08/1058/01

[a]See Table 30 for footnotes a and b.

Table 57

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total PMR Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	08/395/10	09/395/06	15/395/002	02/395/62	14/395/004	05/395/30
16	03/396/59	02/396/71	23/396/0005	08/396/09	12/396/01	09/396/06
17	05/396/29	03/396/57	-08/396/09	05/396/33	-11/396/02	11/396/02
18	-05/381/34	-01/381/96	-06/381/22	05/381/31	-03/381/54	10/381/04
19	01/376/82	04/376/48	07/376/16	01/376/78	-00/376/94	03/376/51
20	-01/360/79	07/360/16	03/360/62	04/360/42	09/360/10	06/360/29
21	01/377/79	11/377/04	-01/377/80	05/377/30	05/377/30	17/377/001
22	-05/376/31	-01/376/99	-03/376/62	10/376/06	02/376/71	13/376/01
23	02/380/66	-01/380/98	01/380/76	24/380/0005	05/380/33	20/380/0005
24	-09/398/07	-14/398/005	-05/398/36	04/398/48	-01/398/89	13/398/009
25	-02/388/71	14/388/006	-06/388/22	12/388/01	11/388/02	08/388/10
26	07/395/15	05/395/28	01/395/77	13/395/01	09/395/07	05/395/36
27	-01/396/98	-02/396/69	16/396/001	01/396/90	04/396/38	08/396/13
28	11/396/03	-03/396/58	04/396/44	08/396/09	03/396/61	04/396/45
29	-02/397/67	-02/397/73	04/397/46	13/397/01	01/397/97	08/397/10
30	-11/398/03	-15/398/002	03/398/57	01/398/90	-08/398/13	-19/398/0005
31	-04/395/39	-04/395/47	06/395/27	07/395/17	-01/395/80	04/395/48
32	08/396/12	-01/396/98	02/396/70	06/396/20	-02/396/71	-01/396/83
33	-04/386/50	-14/386/006	-01/386/80	06/386/28	-12/386/01	-04/386/47
34	04/394/38	02/394/70	07/394/14	18/394/0005	05/394/31	-01/394/94
35	07/396/16	06/396/23	05/396/37	13/396/009	04/396/48	-01/396/96
36	-07/390/16	05/390/30	05/390/37	-02/390/74	01/390/84	-21/390/0005

[a]See Table 30 for footnotes a and b.

Table 58

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total MAN Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	48/133/0005	39/133/0005	65/133/0005	-15/133/07	49/133/0005	37/132/0005
16	41/133/0005	35/133/0005	68/133/0005	-37/133/0005	45/133/0005	22/132/009
17	-06/131/47	-11/131/21	18/131/04	-10/131/27	-09/131/32	-33/131/0005
18	-04/99/72	-16/99/12	-01/99/88	11/99/26	-04/99/69	49/99/0005
19	04/101/72	05/101/62	06/101/54	-01/101/96	03/101/79	-18/101/07
20	-06/131/48	-02/131/85	-05/131/54	03/131/77	04/131/61	14/131/11
21	-21/132/01	-16/132/06	-31/132/0005	07/132/40	-10/132/254	-11/132/185
22	17/132/04	30/132/0005	11/132/22	20/132/02	19/132/03	68/132/0005
23	13/132/13	13/132/12	18/132/04	-03/132/75	25/132/003	34/132/0005
24	24/133/005	39/133/0005	06/13/51	-01/133/98	42/133/0005	47/132/0005
25	42/133/0005	45/133/0005	46/133/0005	-23/133/009	33/133/0005	48/132/0005
26	-39/133/0005	-24/133/005	-46/133/0005	27/133/001	-35/133/0005	-03/132/73
27	-13/133/14	-05/133/53	-20/133/02	27/133/002	-11/133/22	06/132/49
28	50/133/0005	42/133/0005	36/133/0005	-22/133/01	43/133/0005	24/132/005
29	52/133/0005	41/133/0005	53/133/0005	-04/133/67	40/133/0005	36/132/0005
30	37/133/0005	32/133/0005	65/133/0005	-37/133/0005	37/133/0005	28/132/001
31	31/133/0005	32/133/0005	44/133/0005	-23/133/008	31/133/0005	25/132/003
32	29/133/001	26/133/003	33/133/0005	-04/133/60	29/133/001	23/132/006
33	43/132/0005	31/132/0005	58/132/0005	-35/132/0005	34/132/0005	11/132/19
34	26/133/003	31/133/0005	57/133/0005	-13/133/12	27/133/002	21/132/01
35	31/133/0005	29/133/001	52/133/0005	-08/133/34	27/133/001	14/132/11
36	29/132/001	31/132/0005	49/132/0005	-25/132/004	19/132/02	15/131/07

[a]See Table 30 for footnotes a and b.

Table 59

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total PNR[c] Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-04/299/44	-35/399/0005	13/299/02	11/299/04	51/299/0005	-64/299/0005
16	16/298/006	-06/298/25	22/298/0005	07/298/22	48/298/0005	-37/298/0005
17	-14/297/01	-30/297/0005	01/297/86	04/297/53	35/297/0005	-46/297/0005
18	-10/232/14	13/232/05	07/232/31	09/232/15	04/232/58	17/232/009
19	12/256/05	05/256/43	13/256/04	09/256/15	-01/258/83	05/256/42
20	06/232/39	26/232/0005	18/232/007	-01/232/89	07/232/32	18/232/005
21	16/281/008	25/281/0005	30/281/0005	14/281/02	19/281/001	21/291/001
22	01/284/95	20/284/001	19/284/001	11/284/06	06/284/33	23/284/0005
23	01/293/04	30/293/0005	32/293/0005	26/293/0005	09/293/12	26/293/0005
24	18/300/001	14/300/01	03/300/58	27/300/0005	06/300/288	17/300/003
25	11/299/06	38/299/0005	07/299/22	07/299/210	-24/299/0005	45/299/0005
26	20/299/001	09/299/11	04/299/49	20/299/001	-11/299/04	14/299/01
27	-20/298/001	14/298/33	05/298/38	15/298/009	-07/298/25	13/298/02
28	07/298/20	06/298/33	24/298/0005	27/298/0005	21/298/0005	-10/298/07
29	18/299/002	28/299/0005	32/299/0005	15/299/0005	20/299/0005	05/299/37
30	27/299/0005	18/299/001	32/299/0005	-20/299/74	25/299/0005	-06/299/29
31	18/300/001	14/300/01	12/300/04	22/300/0005	14/300/01	-01/300/99
32	18/299/002	19/299/001	26/299/0005	18/292/002	23/299/0005	-02/299/74
33	12/29/04	17/29/003	23/291/0005	-03/291/56	01/291/92	21/291/0005
34	08/298/15	16/298/007	17/298/003	11/298/05	15/298/01	04/298/52
35	01/298/97	14/298/01	14/298/01	15/298/008	08/298/18	01/298/87
36	12/294/04	06/294/30	10/294/08	09/294/14	24/294/0005	-02/294/73

[a]See Table 30 for footnotes a and b.

[b]PNR=Parents of Non-Retarded.

Table 60

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total Female Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-42/1446/0005	-05/1446/05	31/1446/0005	12/1446/0005	25/1446/0005	-34/1446/0005
16	-42/1443/0005	07/1443/008	35/1443/0005	06/1443/03	13/1443/0005	-23/1443/0005
17	-35/1438/0005	-12/1438/0005	19/1438/0005	08/1438/002	03/1438/19	-37/1438/0005
18	-13/1294/0005	-14/1294/0005	-03/1294/27	17/1294/0005	22/1294/0005	-02/1292/58
19	11/1260/0005	01/1260/63	-03/1260/22	-05/1260/10	-03/1260/38	04/1258/17
20	13/1011/0005	-22/1011/0005	-25/1011/0005	08/1011/01	25/1011/0005	11/1011/001
21	09/1316/001	-17/1316/0005	-21/1316/0005	08/1316/003	21/1316/0005	10/1314/0005
22	-11/1308/0005	-14/1308/0005	-01/1308/82	21/1308/0005	27/1308/0005	-01/1306/64
23	-01/1377/75	-04/1377/19	04/1377/12	21/1377/0005	24/1377/0005	15/1375/0005
24	-21/1447/0005	-10/1447/0005	04/1447/18	10/1447/0005	11/1447/0005	-13/1445/0005
25	11/1389/0005	-18/1389/0005	-20/1389/0005	01/1389/65	07/1389/01	09/1389/001
26	06/1442/03	11/1442/0005	-01/1442/87	-01/1442/85	-08/1442/002	14/1441/0005
27	03/1439/29	07/1439/007	----------	----------	-05/1439/06	13/1437/0005
28	-01/1437/62	-01/1437/80	06/1437/03	06/1437/02	03/1437/22	-01/1436/63
29	19/1440/0005	09/1440/0005	02/1440/38	01/1440/77	06/1440/03	10/1438/0005
30	-03/1433/27	-08/1433/004	06/1433/01	02/1433/42	07/1433/005	-19/1431/0005
31	12/1429/0005	08/1429/004	06/1429/03	005/1429/86	01/1429/84	05/1426/07
32	09/1440/001	02/1440/55	02/1440/54	02/1440/55	03/1440/19	04/1438/13
33	03/1415/30	-09/1415/001	01/1415/96	02/1415/45	05/1415/07	02/1413/57
34	06/1439/03	-04/1439/16	04/1439/11	09/1439/001	12/1439/0005	01/1437/83
35	06/1433/03	-02/1433/41	04/1433/14	11/1433/0005	10/1433/0005	-01/1431/63
36	08/1404/003	-10/1404/0005	-03/1404/33	07/1404/01	12/1404/0005	-05/1403/07

[a]See Table 30 for footnotes a and b.

Table 61

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total Male Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-40/856/0005	01/857/83	39/857/0005	12/858/001	14/858/0005	-31/857/0005
16	-40/857/0005	08/858/01	44/858/0005	07/859/03	07/859/05	-23/858/0005
17	-42/854/0005	-15/855/0005	26/855/0005	06/856/06	-04/856/26	-44/856/0005
18	-08/774/02	-13/773/0005	-03/773/43	19/774/0005	13/774/0005	05/774/19
19	05/815/17	-01/814/859	03/814/37	01/815/93	-02/815/64	04/815/21
20	05/742/17	-24/742/0005	-24/742/0005	13/742/001	18/742/0005	117/742/001
21	10/882/006	-15/821/0005	-19/821/0005	09/822/01	21/822/0005	20/822/0005
22	-02/832/55	-08/831/02	-04/831/24	19/832/0005	26/832/0005	15/832/0005
23	13/840/0005	-03/839/32	01/839/70	22/840/0005	26/840/0005	21/840/0005
24	-05/858/13	-04/859/29	03/859/34	13/860/0005	15/860/0005	-04/859/20
25	09/831/01	-14/831/0005	-16/831/0005	06/832/09	09/832/01	08/831/02
26	08/858/02	16/858/0005	-07/858/03	01/859/92	-05/859/16	14/858/0005
27	02/858/64	14/857/0005	-01/857/71	02/858/60	-05/858/14	03/857/32
28	04/857/21	04/857/22	12/857/0005	05/858/15	06/858/08	-05/857/14
29	22/854/0005	12/854/0005	08/854/02	09/855/006	08/855/02	19/854/0005
30	-05/857/17	-17/857/0005	10/857/003	04/858/23	04/858/22	-14/857/0005
31	08/855/02	09/855/006	10/855/006	03/856/35	04/856/26	06/855/06
32	06/854/06	09/853/009	12/853/0005	11/854/002	07/854/04	01/853/82
33	-03/848/34	-11/847/002	09/847/01	04/848/22	03/848/40	-07/848/04
34	12/855/001	-05/854/16	04/854/28	14/855/0005	09/855/007	04/854/22
35	12/858/0005	-01/857/80	04/857/19	12/858/001	12/858/0005	03/857/37
36	12/846/001	-11/845/001	04/845/29	12/846/0005	13/846/0005	-09/845/01

[a]See Table 30 for footnotes a and b.

Table 62

Sample Sizes, Correlations, and Significance[a] Levels for the ABS-MR Attitude Levels and 22 Predictor Variables[b] for the Total Sample

Var. No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
15	-40/2324/0005	-04/2327/09	34/2327/0005	13/2328/0005	22/2328/0005	-32/2327/0005
16	-40/2322/0005	06/2325/001	38/2325/0005	07/2326/001	11/2326/0005	-23/2325/0005
17	-37/2312/0005	-14/2315/0005	23/2315/0005	08/2316/0005	01/2316/53	-40/2316/0005
18	-11/2086/0005	14/2085/0005	-03/2085/17	18/2086/0005	20/2086/0005	01/2084/80
19	08/2092/0005	-01/2091/90	-01/2091/72	-01/2092/37	-02/2092/32	04/2090/07
20	10/1767/0005	-23/1767/0005	-25/1767/0005	10/1767/0005	23/1767/0005	11/1767/0005
21	09/2157/0005	-17/2156/0005	-20/2156/0005	09/2157/0005	22/2157/0005	14/2155/0005
22	-07/2156/001	-11/2155/0005	-02/2155/380	21/2156/0005	26/2156/0005	05/2154/01
23	05/2237/02	-04/2236/05	03/2236/12	22/2237/0005	25/2237/0005	17/2235/0005
24	-15/2319/0005	-08/2330/0005	04/2320/03	12/2321/0005	13/2321/0005	-10/2318/0005
25	10/2238/0005	-17/2238/0005	-18/2238/0005	03/2239/10	08/2239/0005	08/2236/0005
26	07/2320/002	14/2320/0005	-04/2320/06	-01/2321/62	-08/2321/0005	15/2319/0005
27	02/2317/25	10/2316/0005	-01/2316/75	01/2317/87	-05/2317/01	10/2314/005
28	01/2315/61	01/2315/63	09/2315/0005	06/2316/002	05/2316/03	-03/2314/15
29	20/2311/0005	10/2311/0005	05/2311/02	04/2312/04	06/2312/002	13/2309/0005
30	-04/2310/08	-12/2310/0005	08/2310/0005	03/2311/02	07/2311/002	-17/2308/0005
31	10/2304/0005	08/2304/0005	07/2304/0005	02/2305/41	02/2305/30	05/2302/01
32	08/2312/0005	04/2311/03	05/2311/01	05/2312/02	04/2312/04	03/2309/11
33	01/2280/96	-10/2279/0005	04/2279/04	04/2280/07	05/2280/02	-02/2278/25
34	08/2313/0005	-04/2312/03	05/2312/01	11/2313/0005	12/2313/0005	01/2310/59
35	08/2311/0005	-02/2310/33	05/2310/02	11/2311/0005	11/2311/0005	-01/2308/95
36	10/2270/0005	-11/2269/0005	----------	09/2270/0005	12/2270/0005	-06/2268/003

[a]See Table 30 for footnotes a and b.

Table 63

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels and Selected Variables[b] for the Total SER[c] Sample[d]

	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel.	6-Action
18 HP[c] Amount	02(76)	-01(77)	-03(56)	-01(76)	-07(20)	01(90)
19 HP Avoid	17(001)	-09(07)	01(94)	07(20)	01(87)	-09(08)
20 HP Income	-04(41)	12(01)	08(12)	01(79)	-04(47)	-08(13)
21 HP Alter.	-14(005)	-24(0005)	01(82)	27(0005)	10(05)	-05(38)
22 MR Amount	-04(48)	-02(75)	03(60)	-02(64)	05(32)	04(45)
23 MR Enjoyment	03(57)	07(15)	-03(62)	01(83)	-06(22)	-05(32)
Multiple R	24(005)	33(005)	10(02)	34(005)	14(005)	17(005)
15 Efficacy-Con.	-19(0005)	11(03)	17(001)	14(005)	27(0005)	21(0005)
17 MR Knowledge	-47(0005)	04(44)	42(0005)	04(42)	-36(0005)	-26(0005)
22 MR Amount	-02(69)	-06(26)	-02(73)	04(49)	08(12)	05(30)
23 MR Enjoyment	11(02)	-10(04)	-04(41)	03(54)	-06(21)	-08(12)
24 Age	06(21)	-03(51)	-08(11)	01(76)	-03(47)	-05(37)
25 Educ. Amount	07(16)	-19(0005)	-12(01)	15(004)	15(004)	-07(14)
Multiple R	58(005)	29(005)	51(005)	28(005)	40(005)	33(005)
28 Self Change	-01(89)	16(002)	01(91)	14(007)	-01(88)	-04(44)
29 Child Rear.	06(20)	08(12)	01(84)	06(25)	07(19)	-02(75)
30 Birth Cont.	02(72)	-09(08)	06(25)	-01(89)	-05(31)	-16(002)
31 Automation	19(0005)	10(05)	03(56)	-09(08)	-01(81)	06(25)
32 Polit. Lead.	17(001)	-10(05)	-08(10)	-11(02)	-05(37)	-03(54)
33 Rule Adher.	-08(09)	-13(01)	01(91)	15(004)	-04(49)	-09(06)
Multiple R	32(005)	29(005)	12(02)	28(005)	10(02)	24(005)

[a]Significance levels in parenthesis.

[b]See Table 6 for variable names and meaning

[c]SER=Special education/rehabilitation personnel

[d]N=386

Table 64

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels and Selected Variables[b] for the Total RST[c] Sample[d]

Var. No.		ABS-MR Levels					
		1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18.	HP Amount	-12 (0005)	-01(79)	08 (007)	03(38)	-03(28)	-04(10)
19.	HP Avoid	-01(80)	-01(92)	01(75)	01(65)	-04(15)	01(73)
20.	HP Income	01(79)	09 (004)	04(15)	-04(12)	-05(11)	01(71)
21.	HP Alter.	-10 (001)	-12 (0005)	-01(88)	07 (02)	08 (009)	-11 (001)
22.	MR Amount	06(06)	04(17)	-01(52)	-04(17)	-01(74)	07 (01)
23.	MR Enjoyment	01(92)	03(32)	02(33)	-01(56)	06 (03)	03(28)
Multiple R		18 (005)	14 (005)	13 (005)	08 (005)	11 (005)	13 (005)
15.	Efficacy-Con.	-28 (0005)	02(46)	20 (0005)	-04(23)	10 (001)	-01(88)
17.	MR Knowledge	-22 (0005)	-23 (0005)	04(16)	03(40)	03(36)	-38 (0005)
22.	MR Amount	02(48)	04(18)	01(79)	-03(35)	01(87)	06 (03)
23.	MR Enjoyment	10(88)	10 (001)	07 (01)	-01(70)	01(64)	11 (001)
24.	Age	04(14)	-15 (0005)	-08 (006)	04(20)	11 (0005)	-04(17)
25.	Educ. Amount	-11 (001)	-08 (009)	-03(24)	03(28)	-07 (01)	-13 (0005)
Multiple R		47 (005)	35 (005)	25 (005)	07 (02)	17 (005)	48 (005)
28.	Self Change	-03(39)	01(69)	05(10)	01(89)	01(61)	02(49)
29.	Child Rear.	08 (006)	06 (03)	-03(39)	01(89)	02(48)	07 (02)
30.	Birth Cont.	-04(13)	-20 (0005)	-02(46)	06 (03)	02(49)	-15 (0005)
31.	Automation	07 (01)	10 (002)	08 (01)	-01(74)	-05(09)	02(52)
32.	Polit. Lead	04(15)	01(87)	01(83)	07 (01)	04(15)	05(12)
33.	Rule Adher.	-04(18)	-10 (002)	06 (04)	04(22)	08 (01)	-06(06)
Multiple R		15 (005)	26 (005)	11 (005)	11 (005)	11 (005)	19 (005)

[a]See Table 30 for footnotes a and b.

[c]RST=Regular School Reachers

[d]N=1094

Table 65

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels and Selected Variables[b] for the Total PMR[d] Sample

Var.[b] No.	ABS-MR Levels					
	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18. HP Amount	03(59)	11(03)	09(05)	-05(30)	09(07)	06(24)
19. HP Avoid	01(81)	-02(74)	-02(62)	-02(72)	-01(76)	05(35)
20. HP Income	06(22)	-01(93)	-01(89)	05(30)	-03(51)	07(19)
21. HP Alter.	-03(49)	06(18)	07(13)	-03(51)	07(14)	-06(007)
22. MR Amount	02(74)	05(29)	-04(38)	03(53)	01(78)	14(007)
23. MR Enjoyment	-07(17)	-01(76)	-01(82)	08(12)	03(43)	07(13)
Multiple R	11(02)	17(005)	13(005)	11(005)	15(005)	26(005)
15. Efficacy-Con.	07(13)	06(20)	13(01)	01(79)	09(08)	02(74)
17. MR Knowledge	07(18)	-01(76)	-07(14)	02(73)	-15(003)	09(06)
22. MR Amount	03(52)	08(09)	01(89)	01(86)	02(67)	15(004)
23. MR Enjoyment	-09(07)	-02(75)	-01(87)	04(34)	05(28)	15(004)
24. Age	-08(11)	-14(006)	-05(31)	04(46)	-01(73)	13(01)
25. Educ. Amount	-02(16)	11(02)	-04(44)	12(02)	13(01)	02(75)
Multiple R	16(005)	22(005)	17(005)	15(005)	22(005)	28(005)
28. Self Change	14(006)	01(92)	03(55)	08(12)	04(43)	03(59)
29. Child Rear.	-01(82)	-01(87)	03(61)	10(05)	01(88)	08(11)
30. Birth Cont.	-10(03)	-13(01)	01(79)	-02(67)	-06(24)	-20(0005)
31. Automation	-03(89)	01(89)	04(38)	01(88)	-01(74)	03(60)
32. Polit. Lead	01(87)	-10(03)	-01(92)	04(39)	-07(14)	-01(87)
33. Rule Adher.	01(87)	-10(03)	-01(92)	04(39)	-07(14)	-01(87)
Multiple R	18(005)	18(005)	08(02)	16(005)	11(005)	22(005)

[a]See Table 30 for footnotes a and b

[c]PMR=Parents of Mentally Retarded

[d]N=398

Table 66

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels and Selected Variables[b] for the Total MAN[c] Sample[d]

Var. No.		ABS-MR Levels					
		1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18.	HP Amount	34 (0005)	40 (0005)	34 (0005)	-14 (11)	38 (0005)	38 (0005)
19.	HP Avoid	-16 (07)	-36 (0005)	08 (34)	-08 (34)	-12 (18)	-17 (05)
20.	HP Income	-15 (08)	-18 (04)	-28 (001)	16 (07)	-21 (01)	02 (80)
21.	HP Alter.	11 (23)	13 (14)	11 (21)	03 (75)	11 (19)	24 (007)
22.	MR Amount	-06 (47)	-04 (64)	-04 (67)	-08 (38)	05 (58)	-18 (03)
23.	MR Enjoyment	02 (84)	15 (08)	-08 (35)	25 (004)	03 (71)	56 (0005)
Multiple R		45 (005)	56 (005)	56 (005)	32 (005)	48 (005)	74 (005)
15.	Efficacy-Con.	36 (0005)	25 (005)	53 (0005)	-09 (30)	45 (0005)	40 (0005)
17.	MR Knowledge	-08 (37)	01 (93)	09 (33)	04 (69)	09 (29)	-03 (73)
22.	MR Amount	-06 (50)	-07 (45)	-14 (11)	02 (85)	11 (23)	08 (37)
23.	MR Enjoyment	04 (61)	18 (04)	05 (61)	25 (005)	09 (29)	63 (0005)
24.	Age	05 (57)	22 (01)	-04 (10)	06 (51)	36 (0005)	13 (14)
25.	Educ. Amount	25 (005)	22 (01)	34 (0005)	-23 (009)	-01 (98)	10 (26)
Multiple R		56 (005)	58 (005)	72 (005)	35 (005)	62 (005)	76 (015)
28.	Self Change	33 (0005)	25 (04)	04 (68)	-13 (15)	25 (003)	09 (31)
29.	Child Rear.	29 (001)	21 (02)	23 (008)	22 (01)	13 (13)	22 (01)
30.	Birth Cont.	-04 (68)	03 (73)	36 (0005)	-22 (01)	05 (55)	03 (70)
31.	Automation	07 (37)	14 (11)	18 (04)	-07 (43)	09 (32)	06 (50)
32.	Polit. Lead	02 (85)	04 (63)	10 (23)	04 (68)	08 (37)	11 (21)
33.	Rule Adher.	19 (02)	03 (63)	20 (02)	-20 (02)	15 (09)	-02 (80)
Multiple R		64 (005)	53 (005)	74 (005)	46 (005)	55 (005)	41 (005)

[a]See Table 30 for footnotes a and b

[c]MAN=Managers/Executives

[d]N=133

Table 67

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels and Selected Variables[b] for the Total PNR[c] Sampled[d]

Var. No.		ABS-MR Levels					
		1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18.	HP Amount	-01(89)	06(31)	01(86)	08(18)	-01(88)	08(18)
19.	HP Avoid	-12(04)	-05(39)	06(31)	-14(01)	09(12)	-13(02)
20.	HP Income	01(81)	-05(38)	02(69)	-01(87)	08(17)	01(85)
21.	HP Alter.	-04(53)	13(02)	05(35)	-10(08)	-14(01)	09(12)
22.	MR Amount	13(02)	12(03)	19(001)	11(05)	16(007)	04(44)
23.	MR Enjoyment	02(72)	09(14)	01(86)	14(01)	-05(37)	18(002)
Multiple R		19(005)	31(005)	35(005)	24(005)	26(005)	32(005)
15.	Efficacy-Con.	05(42)	-13(02)	22(0005)	15(009)	40(0005)	-43(0005)
17.	MR Knowledge	-15(01)	-12(04)	-07(23)	-01(87)	11(05)	-15(01)
22.	MR Amount	14(01)	18(002)	27(0005)	08(15)	22(0005)	13(02)
23.	MR Enjoyment	-08(16)	-01(93)	11(05)	07(22)	11(05)	02(75)
24.	Age	18(002)	09(10)	-03(63)	24(0005)	05(44)	18(002)
25.	Educ. Amount	02(78)	21(0005)	06(29)	06(27)	-05(37)	13(02)
Multiple R		28(005)	48(005)	40(005)	34(005)	58(005)	67(005)
28.	Self Change	03(64)	-01(88)	16(007)	28(0005)	11(04)	-09(12)
29.	Child Rear.	07(26)	20(001)	23(0005)	04(50)	10(08)	06(34)
30.	Birth Cont.	20(001)	12(03)	25(0005)	-12(04)	16(006)	-03(58)
31.	Automation	10(09)	02(68)	-04(45)	21(0005)	04(49)	-01(90)
32.	Polit. Lead	08(14)	10(08)	16(007)	13(02)	15(009)	-02(70)
33.	Rule Adher.	13(02)	20(001)	22(0005)	-05(38)	03(58)	25(0005)
Multiple R		35(005)	38(005)	51(005)	39(005)	35(005)	26(005)

[a]See Table 30 for footnotes a and b

[c]PNR-Parents of Non-Retarded

[d]N=300

Table 68

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels Selected Variables[b] for the Total Female Sample[c]

Var.[b] No.		ABS-MR Levels					
		1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18.	HP Amount	-01(69)	-01(64)	04(12)	-01(87)	01(65)	01(64)
19.	HP Avoid	-01(50)	01(84)	07(008)	-01(69)	07(008)	-01(81)
20.	HP Income	08(002)	-06(04)	-13(0005)	02(57)	01(63)	02(39)
21.	HP Alter.	-06(01)	-09(001)	-01(89)	07(003)	10(0005)	-03(21)
22.	MR Amount	09(001)	-05(04)	-11(0005)	-04(08)	03(25)	05(04)
23.	MR Enjoyment	-10(0005)	-02(52)	04(17)	12(0005)	07(005)	-02(25)
Multiple R		19(005)	23(005)	25(005)	21(005)	31(005)	07(02)
15.	Efficacy-Con.	-28(0005)	01(63)	22(0005)	05(04)	23(0005)	-18(0005)
17.	MR Knowledge	21(0005)	-08(003)	12(0005)	04(09)	07(009)	-26(0005)
22.	MR Amount	05(04)	-14(0005)	-12(0005)	02(52)	15(0005)	01(88)
23.	MR Enjoyment	-01(78)	02(54)	02(41)	13(0005)	11(0005)	08(003)
24.	Age	-10(0005)	-06(02)	-05(06)	02(47)	01(90)	-08(003)
25.	Educ. Amount	01(71)	-10(0005)	-12(0005)	-01(92)	03(31)	04(17)
Multiple R		47(005)	25(005)	38(005)	21(005)	36(005)	41(005)
28.	Self Change	-02(43)	01(94)	05(05)	07(008)	02(47)	-01(91)
29.	Child Rear.	13(0005)	07(007)	01(77)	01(79)	05(06)	08(004)
30.	Birth Cont.	-06(02)	-08(004)	06(01)	01(59)	05(03)	-18(0005)
31.	Automation	08(002)	07(01)	05(04)	-02(51)	-04(16)	01(65)
32.	Polit. Lead	06(02)	-01(83)	01(88)	01(60)	02(30)	03(18)
33.	Rule Adher.	05(06)	-06(02)	01(88)	01(71)	04(13)	03(20)
Multiple R		20(005)	14(005)	11(005)	08(005)	10(005)	19(005)

[a]See Table 30 for footnotes a and b

[c]N=1450

Table 69

Partial and Multiple Correlations and Significance[a] Levels Between the ABS-MR Attitude Levels Selected Variables[b] for the Total Male Sample[c]

Var. No.		ABS-MR Levels					
		1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
18.	HP Amount	-01(85)	09(006)	02(47)	-01(73)	-02(50)	09(009)
19.	HP Avoid	01(90)	-03(26)	09(009)	02(52)	-06(06)	-05(11)
20.	HP Income	04(19)	01(80)	01(73)	-06(04)	-03(41)	01(78)
21.	HP Alter.	-09(008)	-18(0005)	-10(003)	09(008)	04(19)	-11(001)
22.	MR Amount	11(002)	-04(23)	-10(003)	01(91)	08(01)	13(0005)
23.	MR Enjoyment	-03(37)	02(49)	-01(74)	10(004)	18(0005)	09(006)
Multiple R		14(005)	27(005)	23(005)	20(005)	28(005)	25(005)
15.	Efficacy-Con.	-20(0005)	08(01)	29(0005)	06(05)	12(001)	-10(003)
17.	MR Knowledge	-28(0005)	-17(0005)	11(001)	02(55)	-10(006)	-36(0005)
22.	MR Amount	05(12)	-13(0005)	-13(0005)	02(62)	11(001)	09(01)
23.	MR Enjoyment	01(80)	01(93)	-02(58)	11(001)	15(0005)	16(0005)
24.	Age	01(86)	-04(19)	-03(44)	10(005)	10(003)	-05(13)
25.	Educ. Amount	02(61)	-05(14)	-04(18)	04(29)	01(77)	-04(23)
Multiple R		44(005)	24(005)	42(005)	22(005)	32(005)	48(005)
28.	Self Change	02(62)	05(15)	90(007)	02(49)	03(28)	-06(07)
29.	Child Rear.	19(0005)	13(0005)	05(17)	07(04)	04(21)	19(0005)
30.	Birth Cont.	-07(04)	-19(0005)	04(19)	01(68)	02(65)	-15(0005)
31.	Automation	06(06)	10(005)	06(06)	01(87)	-01(84)	03(43)
32.	Polit. Lead	07(05)	08(01)	11(001)	09(008)	05(10)	01(89)
33.	Rule Adher.	-01(81)	-06(06)	07(04)	02(60)	01(67)	-03(33)
Multiple R		24(005)	27(005)	23(005)	13(005)	09(02)	25(005)

[a]See Table 30 for footnotes a and b.

[c]N=861

Table 70

Sample Size, Correlations, and Significance Levels[a] for the ABS-MR Attitude Intensity Levels and Amount of Contact with Mentally Retarded Persons and with Handicapped Persons in General for the Total[c] Sample

	Attitude Intensity Levels (Variables 8-13)					
Contact[b] Var's	1-Stereo	2-Norm	3-Moral	4-Hypo.	5-Feel	6-Action
MR	01/2156/92	-01/2155/64	01/2155/87	04/2155/05	18/2153/0005	06/2152/008
HP	-02/2086/38	-06/2085/01	-04/2085/05	01/2085/85	12/2083/0005	-02/2082/38

[a]Each level has three entrees; the first is the correlation, the second is the sample size, and the third is the significance level.

[b]MR=mentally retarded, HP=handicapped person in general.

[c]The book will do a complete analysis by individual samples, nation, and sex.

Table 71

Adjusted[a] Means and Significance Test Results for the Six ABS-MR Levels for the Total[b] Sample Across Nations

ABS-MR Levels	1 SER	2 RST	4 PMR	5 MAN	8 PNR	Groups F	Groups Sig.	Female	Male	Sex F	Sex Sig.	Group Rank[c]	Sex Rank
1-Stereo	41.88	41.46	34.57	33.51	36.31	86.44	.0005	37.39	37.74	0.976	.32	1>2>8>4>5	M>F
2-Norm	29.33	37.75	37.62	33.65	39.48	117.55	.0005	35.67	35.47	0.377	.55	8>2>4>5>1	F>M
3-Moral	35.32	42.03	46.81	43.12	43.15	133.44	.0005	41.51	42.65	12.99	.0005	4>8>5>2>1	M>F
4-Hypo.	45.86	42.78	47.41	43.65	40.60	58.25	.0005	43.76	44.37	4.10	.04	4>1>5>2>8	M>F
5-Feel	45.56	37.50	41.98	35.95	33.99	123.03	.0005	38.65	39.34	3.84	.04	1>4>2>5>8	M>F
6-Action	40.64	41.31	36.77	30.34	37.99	69.40	.0005	37.19	37.63	1.54	.21	2>1>8>4>5	M>F
Level Rank	2<3<6 <1<5<4	5<2<6 <1<3<4	1<6<2 <5<3<4	6<1<2 <5<3<4	5<1<6 <2<4<3								

[a]Equalizes sample size and sex ratio between samples. See appendix for orginal means.

[b]N=2336

[c]Hypothesized rank: 1>4>2>5>8

CHAPTER 6

DISCUSSION, SUMMARY, AND IMPLICATIONS

The original research problem was to study cross-culturally the structure, content, and determinants of attitudes toward mentally retarded persons in Israel and the United States. During the course of the research it was possible to add other countries to the project such that the final research analysis was conducted on data gathered in seven nations. The original research project intended to gather data on several groups, including workers or laborers. Due to the difficulties during the Six-Day War in Israel and thereafter, it was not possible to gather data on the "laborer" group and it was dropped and other groups were added.

The research project finally concentrated primarily on four groups with other groups added in some nations. The four groups were as follows: (a) special education rehabilitation workers--SER, (b) Regular School Teachers--RST, (c) Parents of the Mentally Retarded--PMR, (d) Parents of the Non-Retarded--PNR, (e) and in some nations Managerial Personnel--MAN and Other Professional persons were added. The sample is presented in detail in Table 27 in Chapter 4.

NATURE OF THE PROBLEM

The overall research task was conceptualized into four problems: (a) attitudes toward mentally retarded persons, (b) the structure of attitudes, (c) the content of attitudes, and (d) the determinants or predictors of attitudes.

Two basic views permeate the literature on attitude research: one emphasizing attitude as "predisposition to behavior" and the second emphasizing attitude as "behavior." The definitional position taken in the

present research is that of Guttman (1950, p. 51) who defines attitude as a "delimited totality of behavior with respect to something"--thus, the hyphenated term attitude-behavior. Guttman's definition is consonant with a structural or facet theory approach to the study of attitudes and behavior or attitude-behavior.

A traditional distinction made between attitude and behavior is that between the inclination to act and the action itself. The previous formulation is consistent with that distinction since attitude items are considered verbalization of behavior or actions, not the action itself. The behaviors, in turn, are hypothesized to exist at varying levels, so that the degree of favorableness toward an attitude object which is evidenced on one level is correlated in varying degrees with degrees of favorableness evidenced on other levels of behavior. Attitude, then is seen not as a single psychic position, but as a "delimited totality of behavior with respect to something." In our case, six such "delimited totalities" are the six attitude-behavior scale levels.

The facet theory approach fits within the positivistic definition developed by McGuire (1969, p. 145) and facilitates a cognitive-affective-conative (knowing, feeling and acting) analysis of the human condition. The ABS-MR was developed such that Levels 1 and 2 deal with the cognitive component, Level 3 with the affective component (evaluation), Levels 4 and 5 deal with a combination of affective and conative components, and Level 6 deals with the conative component. Such a system facilitates an examination of the interrelationships of the cognitive-affective-conative components as well as highlighting the usefulness of the conative component as the criterion measure of attitude.

Numerous researchers have demonstrated the significance of attitude in the acceptance of disabled or handicapped persons in certain social

and educational settings. It is postulated that mental retardation, unlike physical disability is, to a large extent, a social concept, created in part by the Industrial Revolution. Increasing technological complexity as well as the progress of medical and psychological science have undoubtedly led to increased rates of retardation, both absolutely rates because of expanding population and better diagnosis and treatment as well as relative rates through identification of those who, while perhaps able to function in a simpler society, are unable to cope with the complex demands of modern society.

In spite of the recognized importance of community attitudes very little research has been directed toward uncovering factors which are instrumental in the development of attitudes toward the mentally retarded. In addition, no research was found which used a facetized design to measure and analyze attitudes toward retardation or any other category of the mentally ill or handicapped.

The review indicates, however, that most of the research studies were inconclusive or contradictory about the predictor variables and I have suggested elsewhere (Jordan, 1968) that the reason might well be attributed to the fact that the attitudes scales were composed of different levels within the Guttman paradigm.

The review further indicates that four classes of variables seems to be important determinants, correlates, and/or predictors: (a) econo-demographic variables such as age, sex, and income, (b) contact factors such as amount, nature, voluntariness, and enjoyment of the contact, (c) socio-psychological factors such as value orientation, and (d) the knowledge factor, i.e., the amount of factural information one has about the attitude object.

The "culture" variable was extensively reviewed in our previous research (Jordan, 1968) since it presents special measurement problems. Three

problems, although not unique to it, are intensified in cross-cultural research: (a) relevancy, (b) equivalency, and (c) comparability. It was accepted in this research that the concept of mental retardation was relevant to each of the research samples, especially since illiterate sectors were not used in the samples. The project director worked closely with the translators in each of the research settings to help ensure the equivalency and comparability of item meanings. Thus, concept versus index equivalence was hopefully achieved.

REVIEW OF HYPOTHESIS CONSTRUCTION

The 15 hypotheses of the study were divided into eight groups. In all but one instance the criterion or dependent variable of attitude is related to one of the predictor variables which were regarded as determinants. The eight groups were:

1. Relating attitudes and values
2. Relating attitudes and knowledge
3. Relating attitudes and contact
4. Relating attitudes and religiosity
5. Relating attitudes and demographic variables
6. Relating attitudes and change orientation
7. Relating attitudes and group membership
8. Relating attitudes and multidimensionality

Instrumentation

The instrumentation consisted of a facet theory derived six level attitude scale and a questionnaire which contained demographic, contact, knowledge, and a scale to measure the value of efficacy or man's sense of control over his environment.

The research instruments were translated into the various languages of the study, in cooperation with the author, by nationals who were both knowledgeable in the professional field of mental retardation and education.

Analysis Procedures

As indicated in a discussion of research design and analyses in Chapter 4, appropriate statistical procedures were employed which permitted testing of differences between groups, both within and across nations, while also permitting the testing of relationships between constructs such as attitude and amount of contact.

RESULTS AND IMPLICATIONS OF HYPOTHESIS TESTING

As pointed out previously, the hypotheses of the study were divided into eight groups. In Chapter 5 we presented the results of hypothesis testing with limited discussions of the implications and possible interpretation. In the remaining sections of this chapter we will attempt to go beyond the specific data and discuss the implications of the findings. The data will be discussed more exhaustively in the forthcoming book.

Relating Attitudes and Values

The hypothesis dealing with these variables was designed to test for relationships between the two constructs of attitude and value. The review of literature indicated that interpersonal values such as one's perceived control over his environment predispose persons or groups toward positive attitudes toward objects that are regarded as different. It was postulated that persons who score higher on a sense of control over their environment would not be threatened by mentally retarded persons or the concept of mental retardation; thus would score more positively on the attitude scale toward mentally retarded persons.

The data indicate that the hypothesis was essentially supported and that the value variable is one of the best predictors of positive attitudes toward the mentally retarded. This has specific implications for mental

retardation in that it suggests that people who work with retardation should be highly secure people with a sense of control over their environment.

Relating Attitudes and Knowledge

Since at least the time of the Greeks, the "pursuit of knowledge" has been idolized as producing a more enlightened and tolerant citizenry. Most of the social psychological research has also indicated that amount of education predisposes one to be more liberal and accepting of differences. Thus the hypothesis relating knowledge and attitude postulated that increased factual knowledge about mental retardation would be predictive of positive attitudes toward the retarded.

The data indicate that the hypothesis was not supported and that, in fact, a negative relationship exists between attitudes and knowledge at the more personal or action oriented attitude levels.

The six-level attitude scale consisted of at least two continua: from other to self and cognitive to affective. The first two levels, Stereotypic and Normative are both cognitive and other oriented and Levels 3-6 reflect varying degrees of affective and personal orientation. The predictor variable of knowledge tended to predict positive attitudes toward the retarded only at Levels 1 and 2 and not at the more personal and affective Levels 3-6.

Relating Attitudes and Contact

The hypotheses in this area were formulated around the assumption that increased experience with something increases one's tolerance and acceptance of that something. Specifically, in this research it was postulated that increased contact with mentally retarded persons would increase favorableness of attitude only if amount of contact per se was concurrent with perceived voluntariness of the contact and reported enjoyment of the contact.

In general, the data support the hypothesis. The data indicate that amount of contact per se is predictive of intensity of attitude but does not predict attitude favorableness. When increased amount of contact per se is accompanied by perceived voluntariness and enjoyment the data indicate that attitude favorableness is more like to ensue.

Relating Attitudes and Demographic Variables

This set of data will be more fully developed in the forthcoming book. In general, amount of education is minimally correlated with positive attitudes and age was not correlated or predictive of attitudes except in certain isolated instances.

Relating Attitudes and Change Orientation

These hypotheses were formulated on the assumption that those who were open to change in certain areas such as child rearing practices, birth control, automation, and regularized change of political leaders would be more positive in their attitudes toward such attitude objects as the mentally retarded. As a general rule the group of change orientation questions did not predict favorable attitudes toward the retarded. The two variables which seemed to work the best were positive attitudes toward new child rearing practices and toward birth control. However, these two variables were not consistently predictive of positive attitudes toward the retarded for all groups.

Relating Attitudes and Group Membership

This hypothesis was formulated on the rationale that certain groups by virtue of their involvement, experience, and contacts with the mentally retarded would be more positive toward the retarded. It was postulated that those who work with the retarded (SER) would be most positive, followed

respectively by parents of the mentally retarded, regular school teachers, managers, and parents of the non-retarded.

The postulated rank order of the groups was achieved on only one attitude level--the Actual Feeling level--but the extremes of the rank order tended to be reflected in several of the other attitude levels. A more extensive within-nation analysis of the data in the forthcoming book may reveal more fully the attitude positiveness of these groups toward the mentally retarded.

Relating Attitudes and Multidimensionality

The basic rationale for this hypothesis was built on the assumption that attitudes are multidimensional and that a facet theory derived instrument such as the ABS-MR would reflect such multidimensionality. The most important findings of this study are perhaps those in this area.

In essence, the data reveal that rank order on the six-level ABS-MR scale is essentially the same across groups and nations. This indicates that the relationship between the subject and attitude object is the most powerful factor influencing the structure of attitudes. The implication is that the degree of positiveness or negativeness of attitude is related to the content of the attitude and the cultural setting but that the structure of attitudes is primarily determined by the relationships between the subject and the object. This further indicates an invariant cross-cultural structure of attitudes and has important implications for cross-cultural measurement problems of comparability.

CROSS-CULTURAL ANALYSIS OF THE DATA

The data contained in this project are rich in analysis possibilities and comparatively little of it has been used in the present report. The tables in the Appendix indicate the volume of data and the intercorrelation matrices of the research groups contain other data about the relationships

between the constructs or variables. All of these data will be exhaustively analyzed in the forthcoming book.

It is also intended to do an analysis in the forthcoming book by the Guttman non-metric analyses procedures.

SUMMARY

The data from the seven-nation analysis strongly support the assertion that attitudes at the action-behavior levels have an affective-value-contactual basis rather than a cognitive-knowledge one. The research presented herein was based on five substantive questions or purposes:

1. To test the simplex hypothesis concerning the object-subject relationship. Six levels of relationship were selected for research.
2. To select relevant situations around which to specify the six relationships.
3. To test the effectiveness of selected variables as predictors of attitudes: values, contact, knowledge, demographic, and change proneness.
4. To ascertain the ability of the ABS-MR to differentiate between groups having different degrees of favorableness of attitude-behaviors toward the mentally retarded.
5. To construct a scale with units that would be semantically equivalent and comparable for cross-cultural research.

The data indicate that the five purposes were essentially achieved: (a) that the ABS-MR attitude-behavior levels do exhibit a simplex structure, (b) that relevant object-situations were selected, (c) that selected variables are effective predictors of favorable attitude-behaviors, (d) that the ABS-MR can differentiate between groups, and (e) that it is acceptably cross-culturally equivalent and comparable.

In summary, the purpose of this research was to develop and substantially use a scale that would allow one to examine those aspects of attitude-behaviors that are invariant, those that are culturally determined, those that are object determined, and those that are situation determined, while at the same time examining the multivariate relationships between these components.

IMPLICATIONS

The implications of the study can be summarized as follows:

1. Amount and enjoyment of contact with the mentally retarded is negatively related to attitudes on ABS-MR scale Levels 1 and 2 and positively on Levels 3-6.
2. Amount of education is primarily related to ABS-MR attitudes on the more abstract-cognitive, and non-affective Levels 1 and 2.
3. Age is primarily related to ABS-MR attitudes on the more concrete and personal Levels 4-6.
4. Special education-rehabilitation personnel score least positively on ABS-MR Levels 1 and 2 and highest on Levels 3 and 4, while the most naive group score highest on Levels 1 and 2, and lowest on Levels 3 and 4.
5. Knowledge about mental retardation is related to ABS-MR attitudes on the more abstract Levels 1 and 2 and not on the behavioral Levels 3-6.
6. The ABS_MR scale level scores obtained for most of the groups and nations assume the following order: $1 < 2 < 3 > 4 > 5 > 6$.
7. The simplex was achieved for most groups and nations, indicating the power and utility of structioned or facet theory derived variables and suggests that attitude formation is largely determined

by subject-object relationships, irrespective of group membership or nationality.

The "logical" order of the six-level ABS-MR instrument intuitively seems a real breakthrough in attitude measurement and understanding. At the "practical level" we need to know: (a) what people think that others think; (b) what they think is the usual thing that society does; (c) what is the right thing to do; (d) what they, themselves, think they would do; (e) what they actually feel or have felt in a situation; and (f) what they have actually done in a situation. These are the six levels of the ABS-MR.

The real need remains to find procedures for instrumenting the predictor variables by some "ordered" means such as had been done for the attitude scale itself. The origins or determinants of attitudes intuitively seems to rest in such factors as age and education, what one knows about the attitude object, personalized value factors, and the kinds of experience and/or contact one has had with the attitude object. Further research needs to deal with the implications of attitude change as it differentially relates to each of the predictors at each of the six levels of the ABS-MR.

The attitude instrument itself needs to be shortened if possible and still maintain adequate validity and reliability. The primary implications of the present research reside in the cross-culturally invariate structure that seems to have been obtained in the attitude-behaviors. This suggests that the primary determinants of attitudes rest in the relationship between the object and the subject. The object-subject relationship is depicted by the six levels (Tables 2 & 3) or the joint struction facets. The culturally invariate object-subject relationship is in accord with Smith and Inkeles (1966, p. 377) who state...."the evidence we find of the transcultural nature of the human psyche...a unity of which we can demonstrate is increasing."

Other findings of the study which have implications for mental retardation are the relationships between attitudes, knowledge, and contact. The data indicate that increased knowledge per se about retardation does not generally lead to more positive attitudes. The data indicate that amount of experience or contact per se does also not lead to positive attitudes but that if one "enjoys" the contact, positive attitudes are more likely to ensue. This has specific implications for mental retardation: if one wants to help people to be positive toward the retarded, he should attempt to help them enjoy their contact, especially the first ones.

A last implication of the research is the place of the value structure or personality of the person interacting with the retarded. Apparently those who feel safe and secure (efficacy) in their environment also feel positive toward the retarded. One can project that as one feels secure, he is not threatened by retardation. This would suggest that people who work with the retarded should be highly secure people and contains implications for training or selection procedures for universities or institutions training personnel to work with the mentally retarded.

A P P E N D I C E S

A.1 Glossary

A.2 Facet Theory Tables A.19-26

A.3 ABS-MR: English

A.4 Counterpart Personnel by Nation

A.5 Statistical Data

A.5.72 Sample Sizes, Means, and Standard Deviations for Research Groups on the ABS-MR

A.5.83 Simplex Results for Research Groups on the ABS-MR

A.6 Code Book

A.7 Variable List by Nation/Group

A P P E N D I X A.1

GLOSSARY

GLOSSARY[1]

Approximation--see "simplex approximation."

Attitude--"Delimited totality of behavior with respect to something" (Guttman, 1950, p. 51).

Joint struction--see also "struction," "lateral struction"--"operationally defined as the ordered sets of . . . five facets from low to high across all five facets simultaneously" (Jordan, 1968, p. 76); that part of the semantic structure of attitude items which can be determined independently of specific response situations.

Content--situation (action, feeling, comparison, circumstances) indicated in an attitude item; generally corresponds to "lateral struction."

Definitional statement--specification of characteristics proper to an item of a given level member, typically stated in phrase or clause form.

Definitional system--ordered group of definitional statements or of the corresponding level members; typically either the group constituting a "semantic path" or the complete group of 12 level members in the "semantic map."

Directionality--characteristic of an item, sometimes called positive or negative, determining agreement with the item as indicating favorableness or unfavorableness toward the attitude object.

Lateral struction--see also "struction," "joint struction"---that part of the semantic structure of attitude items which is directly dependent on specification of situation and object; a more precise term than "content."

Element--one of two or more ways in which a facet may be expressed; in the present system, all joint facets are dichotomous, expressed in one of two ordered elements.

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[1]Credit is given to Maierle (1969) for most of the work in developing this glossary.

Facet--one of several semantic units distinguishable in the verbal expression of an attitude; in the present system, five dichotomous facets are noted within the joint struction.

Facet profile--see "struction profile."

Level--degree of attitude strength specified by the number of strong and weak facets in the member(s) of that level; in the present system, six ordered levels are identified: level 1 is characterized by the unique member having five weak facets; level 2, by members having four weak and one strong facet . . . level 6, by the unique member having five strong facets.

Level member--one of one or more permutations(s) of strong and weak facets which are common to a given level; in the present system, 12 level members have been identified: three on level 2 four on level 3, two on level 4, and one each on levels 1, 5, and 6.

Map--see "semantic map."

Member--see "level member."

Path--see "semantic path."

Profile--see "struction profile."

Reversal--change in a specified order of levels or of correlations, involving only the two indicated levels or correlations.

Semantic--pertaining to or arising from the varying meanings, grammatical forms, or stylistic emphasis of words, phrases, or clauses.

Semantic map--two-dimensional representation of hypothesized relationships among six levels and among 12 level members.

Semantic path--ordered set of level members, typically six, such that each member has one more strong facet than the immediately preceding member and one less strong facet than the immediately following member.

Semantic possibility analysis--linguistic discussion of the implications of the five dichotomous joint facets identified in the present system; of 32 permutations, only 12 are considered logically consistent.

Simplex---specific form of (correlation) matrix, diagonally dominated and decreasing in magnitude away from the main diagonal; see Tables 8 & 9 for comparison of equally spaced and unequally-spaced diagonals.

Simplex approximation--matrix which approaches more or less perfectly the simplex form; existing tests (Kaiser, 1962; Mukherjee, 1966) reflect both ordering of individual entries and sizes of differences between entries and between diagonals.

Strong(er)--opposite of weak(er)--term functionally assigned to one of two elements, to a facet expressed by its strong element, or to a level member characterized by more strong facets than another level member; the strong - weak continuum is presently examined as undimensional.

Struction--see also "joint struction," "lateral struction"--semantic pattern identifiable in any attitude item, or the system of such identifications.

Struction profile--specification, typically indicated by small letters and numerical subscripts, of the permutation(s) of weak and strong elements or facets in a level member or a set of level members; or of permutations of lateral elements or facets.

Transposition---change in a specified order of levels or of correlations involving a change in position of one level or correlation and the corresponding one-place shift in the position of following or preceding levels or correlations.

Weak--opposite of "strong" (which see).

A P P E N D I X A.2

Facet Theory Tables A.19-26

Table A.19

Five-facet Six-Level System of Attitude Verbalizations: Twelve Hypothesized Level Members: Definitional Statements and Descriptive Names

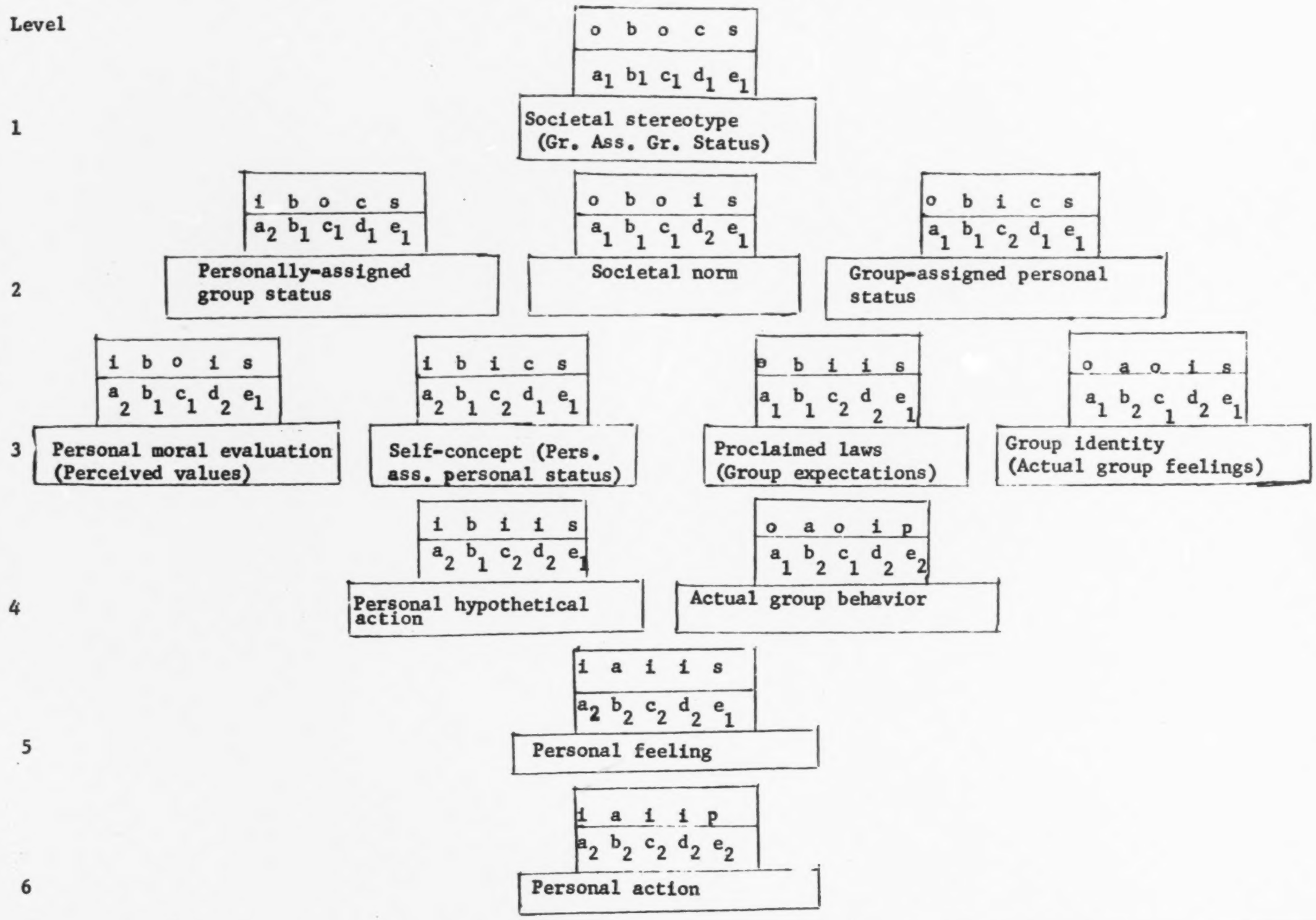
Level
1
o b o c s
a1 b1 c1 d1 e1
Societal stereotype (Gr. Ass. Gr. Status)
2
i b o c s
a2 b1 c1 d1 e1
Personally-assigned group status
o b o i s
a1 b1 c1 d2 e1
Societal norm
o b i c s
a1 b1 c2 d1 e1
Group-assigned personal status
3
i b o i s
a2 b1 c1 d2 e1
Personal moral evaluation (Perceived values)
i b i c s
a2 b1 c2 d1 e1
Self-concept (Pers. ass. personal status)
o b i i s
a1 b1 c2 d2 e1
Proclaimed laws (Group expectations)
o a o i s
a1 b2 c1 d2 e1
Group identity (Actual group feelings)
4
i b i i s
a2 b1 c2 d2 e1
Personal hypothetical action
o a o i p
a1 b2 c1 d2 e2
Actual group behavior
5
i a i i s
a2 b2 c2 d2 e1
Personal feeling
6
i a i i p
a2 b2 c2 d2 e2
Personal action

Table A.20

Semantic Path "A" for a Five-Facet Attitude Universe

Level	Profile by def. state.	Profile by facet change	Descriptive name
	A B C D E	E B C D A	
1	o b o c s	s b o c o	Societal stereotype
2	i b o c s	s b o c i	Personally-assigned group status
3	i b o i s	s b o i i	Personal moral evaluation
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

Table A.21

Semantic Path "B" for a Five-Facet Attitude Universe

Level	Profile by def. state.	Profile by facet change	Descriptive name
	A B C D E	E B D C A	
1	o b o c s	s b c o o	Societal stereotype
2	i b o c s	s b c o i	Personally-assigned group status
3	i b i c s	s b c i i	Self concept
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

Table A.22

Semantic Path "C" for a Five-Facet Attitude Universe[a]

Level	Profile by def. state.	Profile by facet change	Descriptive name
	A B C D E	E B C A D	
1	o b o c s	s b o o c	Societal stereotype
2	o b o i s	s b o o i	Societal norm
3	i b o i s	s b o i i	Personal moral evaluation
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

[a]The set of permutations comprised in this semantic path are those according to which the ABS-MR scale was constructed. Table 4 presents the same set of permutations, with each facet assigned a subscript 1 (weak element) or 2 (strong element).

Table A.23

Semantic Path "D" for a Five-Facet Attitude Universe

Level	Profile by def. state.	Profile by facet change	Descriptive name
	A B C D E	E B A C D	
1	o b o c s	s b o o c	Societal stereotype
2	o b o i s	s b o o i	Societal norm
3	o b i i s	s b o i i	Proclaimed laws
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

Table A.24

Semantic Path "E" for a Five-Facet Attitude Universe

Level	Profile by def, state, A B C D E	Profile by facet change E B D A C	Descriptive name
1	o b o c s	s b c o o	Societal stereotype
2	o b i c s	s b c o i	Group-assigned personal status
3	i b i c s	s b c i i	Self concept
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

Table A.25

Semantic Path "F" for a Five-Facet Attitude Universe

Level	Profile by def, state, A B C D E	Profile by facet change E B A D C	Descriptive name
1	o b o c s	s b o c o	Societal stereotype
2	o b i c s	s b o c i	Group-assigned personal status
3	o b i i s	s b o i i	Proclaimed laws
4	i b i i s	s b i i i	Personal hypothetical action
5	i a i i s	s a i i i	Personal feeling
6	i a i i p	p a i i i	Personal action

Table A.26

Semantic Path "G" for a Five-facet Attitude Universe

Level	Profile by def. state.	Profile by facet change	Descriptive name
	A B C D E	E B D (A) (C)	
1	o b o c s	s b c (o) (o)	Societal stereotype
2	o b o i s	s b i (o) (o)	Societal norm
3	o a o i s	s a i (o) (o)	Group identity (group feelings)
4	o a o i p	p a i (o) (o)	Group behavior

A P P E N D I X A.3

Attitude Behavior Scale-
Mental Retardation ABS-MR

MR-ANS : U.S.

ATTITUDE BEHAVIOR SCALE--MR

DIRECTIONS

This booklet contains statments of how people feel about certain things. In this section you are asked to indicate for each of these statements how most other people believe that mentally retarded people compare to people who are not retarded. Here is a sample statment.

Sample 1.

1. Chance of being blue-eyed

(1) less chance
2. about the same
3. more chance

If other people believe that mentally retarded people have less chance than most people to have blue eyes, you should circle the number 1 as shown above.

If other people believe the mentally retarded have more chance to have blue eyes, you should circle the number 3 as shown below.

1. Chance of being blue-eyed

1. less chance
2. about the same
(3) more chance

After each statement there will also be a question asking you to state how certain or sure you were of your answer. Suppose you answered the sample question about "blue eyes" by marking about the same.

Next you should then indicate how sure you were of this answer. If you felt sure of this answer, you should circle the number 3 as shown below in Sample 2.

Sample 2.

1. Chance of being blue-eyed

1. less chance
(2) about the same
3. more chance

2. How sure are you of this answer?

1. not sure
2. fairly sure
(3) sure

by: John E. Jordan
College of Education
Michigan State University

ABS-I-MR

Directions: Section I

In the statements that follow you are to circle the number that indicates how other people compare mentally retarded persons to those who are not mentally retarded, and then to state how sure you felt about your answer. Usually people are sure of their answers to some questions, and not sure of their answers to other questions. It is important to answer all questions, even though you may have to guess at the answers to some of them.

Other people generally believe the following things about the mentally retarded as compared to those who are not retarded:

1. Energy and vitality ⟷ 2. How sure are you of this answer?

   1. less energetic
   2. about the same
   3. more energetic

   1. not sure
   2. fairly sure
   3. sure

3. Ability to do school work 4. How sure are you of this answer?

   1. less ability
   2. about the same
   3. more ability

   1. not sure
   2. fairly sure
   3. sure

5. Memory 6. How sure are you of this answer?

   1. not as good
   2. same
   3. better

   1. not sure
   2. fairly sure
   3. sure

7. Interested in unusual sex practices 8. How sure are you of this answer?

   1. more interested
   2. about the same
   3. less interested

   1. not sure
   2. fairly sure
   3. sure

9. Can maintain a good marriage 10. How sure are you of this answer?

   1. less able
   2. about the same
   3. more able

   1. not sure
   2. fairly sure
   3. sure

11. Will have too many children 12. How sure are you of this answer?

   1. more than most
   2. about the same
   3. less than most

   1. not sure
   2. fairly sure
   3. sure

ABS-I-MR

Other people generally believe the following things about the mentally retarded as compared to those who are not mentally retarded:

13. Faithful to spouse

1. less faithful
2. about the same
3. more faithful

14. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

15. Will take care of his children

1. less than most
2. about the same
3. better than most

16. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

17. Likely to obey the law

1. less likely
2. about the same
3. more likely

18. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

19. Does steady and dependable work

1. less likely
2. about the same
3. more likely

20. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

21. Works hard

1. not as much
2. about the same
3. more than most

22. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

23. Makes plans for the future

1. not as likely
2. about the same
3. more likely

24. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

25. Prefers to have fun now rather than to work for the future

1. more so than most people
2. about the same
3. less so than most people

26. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-I-MR

Other people generally believe the following things about the mentally retarded as compared to those who are not retarded:

27. Likely to be cruel to others

1. more likely
2. about the same
3. less likely

28. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

29. Mentally retarded are sexually

1. more loose than others
2. about the same
3. less loose than others

30. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

31. Amount of initiative

1. less than others
2. about the same
3. more than others

32. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

33. Financial self-support

1. less able than others
2. about the same
3. more able than others

34. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

35. Mentally retarded prefer

1. to be by themselves
2. to be only with normal people
3. to be with all people equally

36. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

37. Compared to others, education of the mentally retarded

1. is not very important
2. is of uncertain importance
3. is an important social goal

38. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

39. Strictness of rules for mentally retarded

1. must be more strict
2. about the same
3. need less strict rules

40. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-II-MR

Directions: Section II

This section contains statements of ways in which other people sometimes act toward people. You are asked to indicate for each of these statements what other people generally believe about interacting with the mentally retarded in such ways. You should then indicate how sure you feel about your answer.

Other people generally believe that mentally retarded persons ought:

41. To play on the school playground with other children who are not mentally retarded

    1. usually not approved
    2. undecided
    3. usually approved

42. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

43. To visit in the homes of other children who are not mentally retarded

    1. usually not approved
    2. usually undecided
    3. usually approved

44. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

45. To go on camping trips with other children who are not mentally retarded

    1. usually not approved
    2. undecided
    3. usually approved

46. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

47. To be provided with simple tasks since they can learn very little

    1. usually believed
    2. undecided
    3. not usually believed

48. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

49. To stay overnight at the homes of children who are not mentally retarded

    1. usually not approved
    2. undecided
    3. usually approved

50. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

ABS-II-MR

Other people generally believe that mentally retarded persons ought:

51. To go to parties with other children who are not mentally retarded

1. usually not approved
2. undecided
3. usually approved

52. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

53. To be hired for a job only if there are no qualified non-mentally retarded people seeking the job

1. usually approved
2. undecided
3. usually not approved

54. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

55. To live in the same neighborhood with people who are not mentally retarded

1. usually not approved
2. undecided
3. usually approved

56. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

57. To date a person who is not mentally retarded

1. usually not approved
2. undecided
3. usually approved

58. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

59. To go to the movies with someone who is not mentally retarded

1. usually not approved
2. undecided
3. usually approved

60. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

61. To marry a person who is not mentally retarded

1. usually not approved
2. undecided
3. usually approved

62. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

63. To be sterilized (males)

1. usually approved
2. undecided
3. usually not approved

64. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-II-MR

Other people generally believe that mentally retarded persons ought:

65. To be sterilized (females)

1. usually approved
2. not sure
3. usually not approved

66. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

67. To be desirable as friends

1. not usually approved
2. not sure
3. usually approved

68. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

69. To be regarded as having sex appeal

1. not usually so
2. not sure
3. usually so

70. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

71. To be regarded as dangerous

1. usually so regarded
2. not sure
3. notusually regarded so

72. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

73. To run machines that drill holes in objects

1. usually not approved
2. not sure
3. usually approved

74. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

75. To be trusted with money for personal expenses

1. not usually so
2. not sure
3. usually so

76. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

77. To work at jobs he can do even if he has almost no speech

1. not usually so
2. not sure
3. usually so

78. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

79. To be forced to totally provide for themselves

1. usual
2. not sure
3. not usual

80. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

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ABS-III-MR

Directions: Section III

This section contains statments of the "right" or "moral" way of acting toward people. You are asked to indicate whether you yourself agree or disagree with each statement according to how you personally believe you ought to behave toward mentally retarded persons. You should then indicate how sure you feel about your answer.

In respect to people who are mentally retarded, do you believe that it is usually right or usually wrong:

81. To take a mentally retarded child on a camping trips with normal children

1. usually wrong
2. undecided
3. usually right

82. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

83. To permit a mentally retarded child to go to the movies with children who are not mentally retarded

1. usually wrong
2. undecided
3. usually right

84. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

85. To allow a mentally retarded child to visit overnight with a child who is not mentally retarded

1. usually wrong
2. undecided
3. usually right

86. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

87. To take a mentally retarded child to a party with children who are not mentally retarded

1. usually wrong
2. undecided
3. usually right

88. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

89. For the government to pay part of the cost of elementary education for mentally retarded children

1. usually wrong
2. undecided
3. usually right

90. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-III-MR

In respect to people who are mentally retarded, do you believe that it is usually right or usually wrong:

91. For the government to pay the full cost of elementary education for mentally retarded children

1. usually wrong
2. undecided
3. usually right

92. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

93. For the government to pay the full cost of a high school education for mentally retarded children

1. usually wrong
2. undecided
3. usually right

94. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

95. For the government to pay part of the medical costs related to the disability

1. usually wrong
2. undecided
3. usually right

96. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

97. For the government to pay all of the medical costs related to the disability

1. usually wrong
2. undecided
3. usually right

98. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

99. To be given money for food and clothing by the government

1. usually wrong
2. undecided
3. usually right

100. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

101. To mix freely with people who are not mentally retarded at parties

1. usually wrong
2. undecided
3. usually right

102. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-III-MR

In respect to people who are mentally retarded, do you believe that it is usually right or usually wrong:

103. To go on dates with someone who is not mentally retarded

1. usually wrong
2. undecided
3. usually right

104. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

105. To go to the movies with someone who is not mentally retarded

1. usually wrong
2. undecided
3. usually right

106. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

107. To marry someone who is not mentally retarded

1. usually wrong
2. undecided
3. usually right

108. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

109. To be a soldier in the army

1. usually wrong
2. undecided
3. usually right

110. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

111. To provide special laws for their protection

1. usually wrong
2. undecided
3. usually right

112. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

113. To provide special help to get around the city

1. usually wrong
2. not sure
3. usually right

114. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

115. To sterilize the mentally retarded

1. usually right
2. not sure
3. usually wrong

116. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-III-MR

In respect to people who are mentally retarded, do you believe that it is usually right or usually wrong:

117. To put all mentally retarded in separate classes, away from normal children

1. usually right
2. not sure
3. usually wrong

118. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

119. To reserve certain jobs for the mentally retarded

1. usually wrong
2. not sure
3. usually right

120. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-IV-MR

Directions: Section IV

This section contains statments of ways in which people sometimes act toward other people. You are asked to indicate for each of these statments whether you personally would act toward mentally retarded people according to the statment. You should then indicate how sure you feel about this answer.

In respect to a mentally retarded person, would you:

121. Share a seat on a train for a long trip

1. no
2. don't know
3. yes

122. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

123. Have such a person as a fellow worker

1. no
2. don't know
3. yes

124. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

125. Have such a person working for you

1. no
2. don't know
3. yes

126. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

127. Live in the next-door house or apartment

1. no
2. don't know
3. yes

128. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

129. Extend an invitation to a party at your house

1. no
2. don't know
3. yes

130. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

131. Accept a dinner invitation at his house

1. no
2. don't know
3. yes

132. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

MR-ANS : U.S.

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ABS-IV-MR

In respect to a mentally retarded person, would you:

133. Go to the movies together

1. no
2. don't know
3. yes

134. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

135 Go together on a date

1. no
2. don't know
3. yes

136. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

137. Permit a son or daughter to date this person

1. no
2. don't know
3. yes

138. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

139. Permit a son or daughter to marry this person

1. no
2. don't know
3. yes

140. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

141. Feel sexually comfortable together

1. no
2. don't know
3. yes

142. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

143. Enjoy working with the mentally retarded

1. no
2. don't know
3. yes

144. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

145. Enjoy working with the mentally retarded as much as other handicapped

1. no
2. don't know
3. yes

146. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

147. Enjoy working with mentally retarded who also have emotional problems

1. no
2. don't know
3. yes

148. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-IV-MR

In respect to a mentally retarded person, would you:

149. Hire the mentally retarded if you were an employer

1. no
2. don't know
3. yes

150. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

151. Want the mentally retarded in your class if you were a teacher

1. no
2. don't know
3. yes

152. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

153. Require the mentally retarded to be sterilized if you were in control

1. yes
2. don't know
3. no

154. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

155. Separate the mentally retarded from the rest of society if you were in control

1. yes
2. don't know
3. no

156. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

157. Believe that the care of the mentally retarded is an evidence of national social development

1. no
2. don't know
3. yes

158. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

159. Provide, if you could, special classes for the mentally retarded in regular school

1. no
2. don't know
3. yes

160. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

MR-ANS : U.S.

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ABS-V-MR

Directions: Section V

This section contains statements of actual feelings that people may hold toward the mentally retarded. You are asked to indicate how you feel toward people who are mentally retarded compared to people who are not mentally retarded. You should then indicate how sure you feel of your answer.

How do you actually feel toward persons who are mentally retarded compared to others who are not mentally retarded:

1. Disliking

   1. more
   2. about the same
   3. less

2. How sure are you of this answer?

   1. not sure
   2. fairly sure
   3. sure

3. Fearful

   1. more
   2. about the same
   3. less

4. How sure are you of this answer?

   1. not sure
   2. fairly sure
   3. sure

5. Horrified

   1. more
   2. about the same
   3. less

6. How sure are you of this answer?

   1. not sure
   2. fairly sure
   3. sure

7. Loathing

   1. more
   2. about the same
   3. less

8. How sure are you of this answer?

   1. not sure
   2. fairly sure
   3. sure

9. Dismay

   1. more
   2. about the same
   3. less

10. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

11. Hating

    1. more
    2. about the same
    3. less

12. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

13. Revulsion

    1. more
    2. about the same
    3. less

14. How sure are you of this answer?

    1. not sure
    2. fairly sure
    3. sure

ABS-V-MR

How do you actually feel toward persons who are mentally retarded compared to others who are not mentally retarded:

15. Contemptful

1. more
2. about the same
3. less

16. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

17. Distaste

1. more
2. about the same
3. less

18. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

19. Sickened

1. more
2. about the same
3. less

20. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

21. Confused

1. more
2. about the same
3. less

22. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

23. Negative

1. more
2. about the same
3. less

24. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

25. At ease

1. less
2. about the same
3. more

26. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

27. Restless

1. more
2. about the same
3. less

28. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

29. Uncomfortable

1. more
2. about the same
3. less

30. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

ABS-V-MR

How do you actually feel toward persons who are mentally retarded compared to others who are not mentally retarded:

31. Relaxed

1. less
2. about the same
3. more

32. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

33. Tense

1. more
2. about the same
3. less

34. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

35. Bad

1. more
2. about the same
3. less

36. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

37. Calm

1. less
2. about the same
3. more

38. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

39. Happy

1. less
2. about the same
3. more

40. How sure are you of this answer?

1. not sure
2. fairly sure
3. sure

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ABS-VI-MR

Directions: Section VI

This section contains statements of different kinds of actual experiences you have had with mentally retarded persons. If the statment applies to you, circle yes. If not, you should circle no.

Experiences or contacts with the mentally retarded:

41. Shared a seat on a bus, train, or plane
    1. no
    2. uncertain
    3. yes

42. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

43. Eaten at the same table together in a restaurant
    1. no
    2. uncertain
    3. yes

44. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

45. Lived in the same neighborhood
    1. no
    2. uncertain
    3. yes

46. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

47. Worked in the same place
    1. no
    2. uncertain
    3. yes

48. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

49. Had such a person as my boss or employer
    1. no
    2. uncertain
    3. yes

50. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

51. Worked to help such people without being paid for it
    1. no
    2. uncertain
    3. yes

52. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

53. Have acquaintance like this
    1. no
    2. uncertain
    3. yes

54. Has this experience been mostly pleasant or unpleasant?
    1. no such experience
    2. unpleasant
    3. in between
    4. pleasant

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ABS-VI-MR

Experiences or contacts with the mentally retarded:

55. Have good friends like this

1. no
2. uncertain
3. yes

56. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

57. Donated money, clothes, etc., for people like this
1. no
2. uncertain
3. yes

58. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

59. Have a husband(or wife) like this

1. no
2. uncertain
3. yes

60. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

61. I am like this, myself

1. no
2. uncertain
3. yes

62. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

63. My best friend is like this

1. no
2. uncertain
3. yes

64. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

65. Received pay for working with people like this
1. yes
2. no

66. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

67. My children have played with children like this
1. no
2. uncertain
3. yes

68. Has this experience been mostly pleasant or unpleasant?
1. no such experience
2. unpleasant
3. in between
4. pleasant

ABS-VI-MR

Experiences or contacts with the mentally retarded:

69. My children have attended school with children like this

1. no
2. uncertain
3. yes

70. Has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

71. Voted for extra taxes for their education

1. no
2. not certain
3. yes

72. Has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

73. Worked to get jobs for them

1. no
2. not certain
3. yes

74. Has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

75. Have you sexually enjoyed such people

1. no
2. no answer
3. yes

76. Has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

77. Studied about such people

1. no
2. yes

78. Has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

79. Have worked as a teacher with such people

1. no
2. yes

80. has this experience been mostly pleasant or unpleasant?

1. no such experience
2. unpleasant
3. in between
4. pleasant

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This part of the booklet deals with many things. For the purpose of this study, the answers of all persons are important.

Part of the questionnaire has to do with personal information about you. Since the questionnaire is completely anonymous or confidential, you may answer all of the questions freely without any concern about being identified. It is important to the study to obtain your answer to every question.

Please read each question carefully and do not omit any questions. Please answer by circling the answer you choose.

81. Please indicate your sex.

1. Female
2. Male

82. Please indicate your age as follows:

1. Under 20 years of age
2. 21-30
3. 31-40
4. 41-50
5. 50 - over

83. Below are listed several different kinds of schools or educational divisions. In respect to these various kinds or levels of education, which one have you had the most professional or work experience with, or do you have the most knowledge about? This does not refer to your own education, but to your professional work or related experiences with education.

1. I have had no such experience
2. Elementary school (Grade school)
3. Secondary school (High school)
4. College or University
5. Other types

84. What is your marital status?

1. Married
2. Single
3. Divorced
4. Widowed
5. Separated

85. What is your religion?

1. I prefer not to answer
2. Catholic
3. Protestant
4. Jewish
5. Other or none

86. About how important is your religion to you in your daily life?

1. I prefer not to answer
2. I have no religion
3. Not very important
4. Fairly important
5. Very important

87. About how much education do you have?

1. 6 years of school or less
2. 9 years of school or less
3. 12 years of school or less
4. Some college or university
5. A college or university degree

88. Some people are more set in their ways than others. How would you rate yourself?

1. I find it very difficult to change
2. I find it slightly difficult to change
3. I find it somewhat easy to change
4. I find it very easy to change my ways

89. Some people feel that in bringing up children, new ways and methods should be tried whenever possible. Others feel that trying out new methods is dangerous. What is your feeling about the following statement?

"New methods of raising children should be tried out whenever possible."

1. Strongly disagree
2. Slightly disagree
3. Slightly agree
4. Strongly agree

90. Family planning on birth control has been discussed by many people. What is your feeling about a married couple practicing birth control? Do you think they are doing something good or bad? If you had to decide, would you say that are doing wrong, or that they are doing right?

1. It is always wrong
2. It is usually wrong
3. It is probably all right
4. It is always right

91. People have different ideas about what should be done concerning automation and other new ways of doing things. He do you feel about the following statement?

"Automation and similar new procedures should be encouraged (in government, business, and industry) since eventually they create new jobs and raise the standard of living."

1. Strongly disagree
2. Slightly disagree
3. Slightly agree
4. Strongly agree

92. Running a village, city, town, or any governmental organization is an important job. What is your feeling on the following statement?

"Political leaders should be changed regularly, even if they are doing a good job."

1. Strongly disagree
2. Slightly disagree
3. Slightly agree

3960 4. Strongly agree

93. Some poeple believe that more local government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

    1. Strongly disagree
    2. Slightly disagree
    3. Slightly agree
    4. Strongly agree

94. Some people believe that more federal government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

    1. Strongly disagree
    2. Slightly disagree
    3. Slightly agree
    4. Strongly agree

95. People have different ideas about planning for education in their nation. Which one of the following do you believe is the best way?

    1. Educational planning should be primarily directed by the church
    2. Planning for education should be left entirely to the parents
    3. Educational planning should be primarily directed by the individual city or other local governmental unit
    4. Educational planning should be primarily directed by the national government

96. In respect to your religion, about to what extent do you observe the rules and regulations of your religion?

    1. I prefer not to answer
    2. I have no religion
    3. Sometimes
    4. Usually
    5. Almost always

97. I find it easier to follow rules than to do things on my own.

1. Agree strongly
2. Agree slightly
3. Disagree slightly
4. Disagree strongly

QUESTIONNAIRE: HP

This part of the questionnaire deals with your experiences or contacts with handicapped persons. Perhaps you have had much contact with handicapped persons, or you may have studied about them. On the other hand, you may have had little or no contact with handicapped persons, and may have never thought much about them at all.

98. Some handicapped conditions are listed below. In respect to these various handicaps, with which one have you had <u>the most actual experience</u>?

1. blind and partially blind
2. deaf, partially deaf, or speech impaired
3. crippled or spastic
4. mental retardation
5. social or emotional disorders

In the following questions, 99 through 103 you are to refer to the category of the handicapped persons you have just indicated.

99. The following questions have to do with the kinds of experiences you have had with the category of handicapped person you indicated in the previous question. If more than one category of experience applies, please choose the answer with the highest number.

1. I have read or studied about handicapped persons through reading, movies, lectures, or observations
2. A friend or relative is handicapped
3. I have personally work with handicapped persons as a teacher, counselor, volunteer, child care, etc.
4. I, myself, have a fairly serious handicap

100. Considering all of the times you have talked, worked, or in some other way had personal contact with the category of handicapped persons indicated in question 98, about how many times has it been altogether?

1. Less than 10 occasions
2. Between 10 and 50 occasions
3. Between 50 and 100 occasions
4. Between 100 and 500 occasions
5. More than 500 occasions

101. When you have been in contact with this category of handicapped people how <u>easy</u> for you, in general, would it have been to have avoided being with these handicapped persons?

1. I could not avoid the contact
2. I could generally have avoided these personal contacts only at great cost of difficulty
3. I could generally have avoided these personal contacts only with considerable difficulty
4. I could generally have avoided these personal contacts but with some inconvenience
5. I could generally have avoided these personal contacts without any difficulty or inconvenience

102. During your contact with this category of handicapped persons, did you <u>gain materially</u> in any way through these contacts, such as being paid, or gaining academic credit, or some such gain?

1. No, I have never received money, credit, or any other material gain
2. Yes, I have been paid for working with handicapped persons
3. Yes, I have received academic credit or other material gain
4. Yes, I have both been paid and received academic credit

103. <u>If you have been paid</u> for working with handicapped persons, about what percent of your income was derived from contact with handicapped persons during the actual period when working with them?

1. No work experience
2. Less than 25%
3. Between 26 and 50%
4. Between 51 and 75%

104. If you have ever worked with <u>any category</u> of handicapped persons for personal gain (for example, for money or some other gain), what <u>opportunities</u> did you have (or do you have) to work at something else instead; that is, soemthing else that was (or is) acceptable to you as a job?

1. No such experience
2. No other job was available
3. Other jobs available were <u>not at all</u> acceptable to me
4. Other jobs available were <u>not quite</u> acceptable to me
5. Other jobs available were <u>fully</u> acceptable to me

105. Have you had any experience with <u>mentally retarded</u> persons? Considering all of the times you have talked, worked, or in some other way had personal contact with <u>mentally retarded</u> persons, about how many times has it been altogether?

1. Less than 10 occasions
2. Between 10 and 50 occasions
3. Between 50 and 100 occasions
4. Between 100 and 500 occasions
5. More than 500 occasions

106. How have you generally felt about your experiences with mentally retarded persons?

1. No experience
2. I definitely disliked it
3. I did not like it very much
4. I liked it somewhat
5. I definitely enjoyed it

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LIFE SITUATIONS

This section of the booklet deals with how people feel about several aspects of life or life situations. Please indicate how you feel about each situation by circling the answer you choose.

107. It should be possible to eliminate war once and for all

1. strongly disagree
2. disagree
3. agree
4. strongly agree

108. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

109. Success depends to a large part on luck and fate.

1. strongly agree
2. agree
3. disagree
4. strongly disagree

110. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

111. Some day most of the mysteries of the world will be revealed by science.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

112. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

113. By improving industrial and agricultural methods, poverty can be eliminated in the world.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

114. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

115. With increased medical knowledge it should be possible to lengthen the average life span to 100 years or more.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

116. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

117. Someday the deserts will be converted into good farming land by the application of engineering and science.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

118. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

119. Education can only help people develop their natural abilities; it cannot change people in any fundamental way.

1. strongly agree
2. agree
3. disagree
4. strongly disagree

120. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

121. With hard work anyone can succeed.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

122. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

123. Almost every present human problem will be solved in the future.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

124. How sure do you feel about your answer?

1. not sure at all
2. not very sure
3. fairly sure
4. very sure

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MENTAL RETARDATION

This section of the questionnaire deals with information about mental retardation. Please circle your answer[1].

125. Which of the following is a preferred method of educating mentally handicapped children:

1. to give the child work he can do with his hands (handicraft, weaving).
2. to place the child in a vocational training school
(3) to make the program practical and less academic
4. to present the same material presented to the average child but allowing more time for practice.

126. In educating the mentally handicapped (IQ 50-75) child, occupational training should begin:

1. upon entering high school
2. the second year of high school
3. the last year of high school
(4) when the child enters school

127. The major goal of training the mentally handicapped is:

(1) social adequacy
2. academic proficiency
3. occupational adequacy
4. occupational adjustment

128. Normal children reject mentally handicapped children because:

1. of their poor learning ability
(2) of unacceptable behavior
3. they are usually dirty and poor
4. they do not "catch on"

129. The emotional needs of mentally handicapped are:

1. stronger than normal children
(2) the same as normal children
3. not as strong as normal children
4. nothing to be particularly concerned with

130. The proper placement for the slow learner (IQ 75-90) is in:

(1) the regular classroom
2. special class
3. vocational arts
4. regular class until age of 16 and then dropped out of school

[1]"Correct" answers are circled.

131. In school, the slow learner ususally:

1. is given a lot of successful experiences
2. meets with a great many failures
3. is a leader
4. is aggressive

132. In grading the slow learner, the teacher should:

1. be realistic, if the child is a failure, fail him
2. grade him according to his achievement with relation to his ability
3. not be particularly concerned with a grade
4. grade him according to his IQ

133. The studies with regard to changing intelligence of pre-school children indicate that:

1. intellectual change may be accomplished
2. no change can be demonstrated
3. change may take place more readily with older children
4. the IQ can be increased at least 20 points if accelerated training begins early enough

134. The development and organization of a comprehensive educational program for the mentally handicapped is dependent upon:

1. adequate diagnoses
2. proper training facilities
3. a psychiatrist
4. parent-teacher organizations

135. The mentally handicapped are physically:

1. markedly taller
2. markedly shorter
3. heavier
4. about the same as the average child of the same age

136. The mentally handicapped child:

1. looks quite different from other children
2. is in need of an educational program especially designed for his needs and characteristics
3. can never be self-supporting
4. cannot benefit from any educational program

137. The mentally handicapped individual usually becomes:

1. a skilled craftsman
2. a professional person
3. a semi-skilled laborer
4. unemployable

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138. The educationally handicapped have:

1. at least average intelligence
2. superior intelligence only
3. always have retarded intelligence
4. may have somewhat retarded, average, or superior intelligence.

139. The mentally handicapped have:

1. markedly inferior motor development
2. superior motor development
3. superior physical development
4. about average motor development

140. The reaction of the public toward the retarded child seems to be:

1. rejecting
2. somewhat understanding but not completely accepting
3. accepting
4. express feelings of acceptance but really feel rejecting

A P P E N D I X A.4

Counterpart Personnel by Nation

COUNTERPART PERSONNEL

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A P P E N D I X A.5

A.5.72 Sample Sizes, Means, and Standard Deviations for Research Groups on the ABS-MR

A.5.83 Simplex Results for Research Groups on the ABS-MR

Table A.5.72

Sample Sizes, Means, and Standard Deviations on 36 Variables for the ABS-MR SER, RST, PMR, MAN, and PNR Groups[1]

MR INTERNATIONAL STUDY GROUP 1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	385	41.335	9.338	VAR 2	385	29.665	5.057	VAR 3	385	35.660	8.082
VAR 4	386	45.526	6.373	VAR 5	386	45.358	7.349	VAR 6	384	40.430	7.425
VAR 7	386	237.557	2.909	VAR 8	385	46.553	7.046	VAR 9	385	46.221	8.560
VAR10	385	46.049	9.451	VAR11	385	49.826	7.821	VAR12	385	50.984	8.674
VAR13	382	50.084	10.393	VAR14	386	288.578	39.430	VAR15	384	18.919	4.385
VAR16	382	21.427	6.650	VAR17	381	4.764	2.197	VAR18	347	4.579	0.864
VAR19	358	2.726	1.875	VAR20	299	4.064	1.463	VAR21	384	4.047	1.273
VAR22	369	4.554	0.919	VAR23	373	4.531	0.709	VAR24	386	2.889	0.994
VAR25	374	4.366	0.942	VAR26	383	3.567	1.288	VAR27	384	3.174	1.369
VAR28	379	2.491	0.764	VAR29	379	3.251	0.802	VAR30	376	3.306	0.883
VAR31	378	3.349	0.764	VAR32	381	2.541	1.101	VAR33	368	2.829	0.949
VAR34	381	3.304	0.825	VAR35	383	3.248	0.891	VAR36	376	3.529	0.783

MR INTERNATIONAL STUDY GROUP 2 RST

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	1093	41.844	7.987	VAR 2	1094	36.967	7.478	VAR 3	1094	41.399	6.940
VAR 4	1094	43.258	6.837	VAR 5	1094	37.924	8.404	VAR 6	1094	41.031	8.088
VAR 7	1094	242.345	23.451	VAR 8	1093	47.883	7.924	VAR 9	1094	47.568	8.276
VAR10	1094	49.176	7.952	VAR11	1094	50.052	7.907	VAR12	1094	46.553	11.281
VAR13	1094	49.437	10.434	VAR14	1094	290.624	36.195	VAR15	1093	16.920	4.663
VAR16	1093	19.474	6.288	VAR17	1089	5.028	2.232	VAR18	1009	2.401	1.436
VAR19	984	2.799	1.816	VAR20	731	1.442	1.038	VAR21	984	1.618	1.285
VAR22	979	2.146	1.363	VAR23	1039	3.209	1.359	VAR24	1090	2.253	1.054
VAR25	1027	3.647	1.064	VAR26	1091	4.106	1.232	VAR27	1086	3.645	1.358
VAR28	1089	2.480	0.953	VAR29	1087	3.422	0.759	VAR30	1085	2.988	0.870
VAR31	1079	3.316	0.819	VAR32	1085	2.573	1.173	VAR33	1086	2.671	1.044
VAR34	1088	3.233	0.931	VAR35	1081	3.110	0.943	VAR36	1058	3.485	1.168

MR INTERNATIONAL STUDY GROUP 4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	398	33.930	6.036	VAR 2	398	37.990	7.814	VAR 3	398	47.003	5.222
VAR 4	398	47.229	6.311	VAR 5	398	41.786	7.403	VAR 6	398	36.487	5.791
VAR 7	398	244.425	22.283	VAR 8	398	46.302	7.563	VAR 9	398	45.902	8.216
VAR10	398	49.834	7.452	VAR11	398	48.307	8.070	VAR12	396	49.811	9.167
VAR13	397	39.912	10.149	VAR14	398	279.716	35.572	VAR15	395	24.990	3.482
VAR16	396	28.490	4.139	VAR17	396	6.639	2.332	VAR18	381	4.126	1.380
VAR19	376	1.878	1.567	VAR20	360	1.125	0.572	VAR21	377	1.308	0.998
VAR22	376	4.176	1.426	VAR23	380	4.003	1.161	VAR24	398	3.437	0.989
VAR25	388	2.116	1.213	VAR26	395	3.630	1.254	VAR27	396	3.338	1.362
VAR28	396	2.497	0.895	VAR29	397	3.113	0.838	VAR30	398	3.158	0.820
VAR31	395	3.301	0.779	VAR32	396	2.682	1.100	VAR33	386	2.425	1.040
VAR34	394	3.102	0.894	VAR35	396	3.088	0.933	VAR36	390	3.533	0.998

MR INTERNATIONAL STUDY GROUP 5 MAN

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	133	31.286	6.118	VAR 2	133	34.353	8.604	VAR 3	133	44.429	8.682
VAR 4	133	43.188	7.233	VAR 5	133	35.729	7.994	VAR 6	132	29.545	5.659
VAR 7	133	218.308	29.598	VAR 8	133	42.489	7.832	VAR 9	133	41.594	8.747
VAR10	133	47.173	9.000	VAR11	133	45.391	8.851	VAR12	133	46.519	10.638
VAR13	132	29.174	7.943	VAR14	133	252.120	42.788	VAR15	133	23.451	4.439
VAR16	133	27.451	8.955	VAR17	131	7.458	2.617	VAR18	99	2.838	1.455
VAR19	101	3.436	1.615	VAR20	131	1.115	0.536	VAR21	132	1.318	1.006
VAR22	132	2.371	1.422	VAR23	132	2.652	1.284	VAR24	133	3.060	0.967
VAR25	133	3.128	0.930	VAR26	133	3.361	1.054	VAR27	133	3.361	0.995
VAR28	133	2.805	0.836	VAR29	133	2.946	0.903	VAR30	133	3.421	0.828
VAR31	133	3.316	0.782	VAR32	133	2.459	1.048	VAR33	132	3.068	1.013
VAR34	133	3.226	0.901	VAR35	133	3.105	0.931	VAR36	132	3.455	0.804

MR INTERNATIONAL STUDY GROUP 8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	300	35.263	7.683	VAR 2	300	39.840	7.949	VAR 3	300	43.363	7.683
VAR 4	300	40.233	7.626	VAR 5	300	33.877	7.560	VAR 6	300	37.307	10.219
VAR 7	300	229.843	29.869	VAR 8	300	42.637	9.082	VAR 9	300	44.167	9.573
VAR10	300	46.107	9.001	VAR11	300	44.847	9.717	VAR12	300	38.200	10.820
VAR13	300	39.240	12.389	VAR14	300	255.217	40.682	VAR15	299	19.027	5.941
VAR16	298	22.581	6.263	VAR17	297	4.943	2.299	VAR18	282	2.815	1.499
VAR19	256	3.152	1.775	VAR20	232	1.401	1.093	VAR21	281	1.577	1.285
VAR22	284	2.032	1.292	VAR23	293	2.604	1.481	VAR24	300	2.903	0.984
VAR25	299	2.806	1.316	VAR26	299	3.552	1.155	VAR27	298	3.299	1.293
VAR28	298	2.446	0.914	VAR29	299	3.084	0.876	VAR30	299	3.197	0.846
VAR31	300	3.317	0.775	VAR32	299	2.682	1.063	VAR33	291	2.443	0.932
VAR34	298	2.990	0.901	VAR35	298	2.970	0.900	VAR36	294	3.082	0.898

[1]See Table 27 for samples and/or groups.

Table A.5.73

Sample Sizes, Means, and Standard Deviations on 36 Variables for the ABS-MR Female, Male, and Total Groups

MR INTERNATIONAL STUDY ALL FEMALES[1]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	1450	39,017	8,207	VAR 2	1450	36,532	7,894	VAR 3	1450	41,461	7,787
VAR 4	1450	43,615	7,125	VAR 5	1450	38,842	8,900	VAR 6	1448	39,267	8,285
VAR 7	1450	238,679	24,042	VAR 8	1450	46,219	8,191	VAR 9	1450	46,034	8,841
VAR10	1450	47,681	8,643	VAR11	1449	48,382	8,491	VAR12	1448	45,807	11,406
VAR13	1446	45,739	11,657	VAR14	1450	279,639	39,630	VAR15	1446	18,932	5,542
VAR16	1443	21,772	6,755	VAR17	1438	5,182	2,308	VAR18	1294	3,159	1,652
VAR19	1260	2,528	1,815	VAR20	1011	1,786	1,452	VAR21	1316	1,889	1,503
VAR22	1308	2,933	1,712	VAR23	1377	3,396	1,448	VAR24	1447	2,576	1,076
VAR25	1389	3,312	1,290	VAR26	1442	3,933	1,227	VAR27	1439	3,488	1,373
VAR28	1437	2,447	0,906	VAR29	1440	3,247	0,818	VAR30	1433	3,084	0,832
VAR31	1429	3,310	0,775	VAR32	1440	2,640	1,115	VAR33	1415	2,526	1,009
VAR34	1439	3,125	0,924	VAR35	1433	3,048	0,936	VAR36	1404	3,402	1,081

MR INTERNATIONAL STUDY ALL MALES[1]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	859	38,798	8,901	VAR 2	860	35.503	8,058	VAR 3	860	42,472	7,991
VAR 4	861	44,475	7,065	VAR 5	861	39.747	8,298	VAR 6	860	38,569	8,499
VAR 7	861	239.329	26,807	VAR 8	859	46,695	7,968	VAR 9	860	46,670	8,354
VAR10	860	49,221	8,086	VAR11	861	49,420	8,333	VAR12	860	48,374	10,343
VAR13	859	44,880	12,788	VAR14	861	284,880	40,519	VAR15	858	19,887	5,452
VAR16	859	22,951	7,082	VAR17	856	5,741	2,551	VAR18	774	3,140	1,580
VAR19	815	2,951	1,793	VAR20	742	1,805	1,475	VAR21	822	2,055	1,620
VAR22	832	2,895	1,638	VAR23	840	3,550	1,328	VAR24	860	2,894	1,129
VAR25	832	3,487	1,340	VAR26	859	3,665	1,282	VAR27	858	3,393	1,298
VAR28	858	2,593	0,893	VAR29	855	3,304	0,822	VAR30	858	3,185	0,893
VAR31	856	3,331	0,836	VAR32	854	2,518	1,149	VAR33	848	2,854	1,023
VAR34	855	3,299	0,867	VAR35	858	3,216	0,907	VAR36	846	3,520	0,960

MR INTERNATIONAL STUDY TOTAL[1]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	2331	38,912	8,478	VAR 2	2334	36,169	7,967	VAR 3	2335	41,817	7,883
VAR 4	2335	43,913	7,110	VAR 5	2335	39,133	8,722	VAR 6	2332	39,007	8,371
VAR 7	2336	238,717	25,539	VAR 8	2331	46,389	8,124	VAR 9	2334	46,276	8,667
VAR10	2335	48,224	8,493	VAR11	2334	48,740	8,451	VAR12	2332	46,699	11,107
VAR13	2329	45,421	12,100	VAR14	2336	281,331	40,405	VAR15	2328	19,263	5,523
VAR16	2326	22,147	6,897	VAR17	2316	5,381	2,411	VAR18	2086	3,142	1,626
VAR19	2092	2,696	1,818	VAR20	1767	1,791	1,458	VAR21	2157	1,951	1,550
VAR22	2156	2,942	1,683	VAR23	2237	3,448	1,408	VAR24	2321	2,693	1,107
VAR25	2239	3,376	1,309	VAR26	2321	3,836	1,253	VAR27	2317	3,456	1,345
VAR28	2316	2,500	0,906	VAR29	2312	3,266	0,823	VAR30	2311	3,118	0,859
VAR31	2305	3,312	0,804	VAR32	2312	2,592	1,130	VAR33	2280	2,647	1,026
VAR34	2313	3,186	0,914	VAR35	2311	3,106	0,931	VAR36	2270	3,441	1,040

[1]Does not include three test development samples.

Table A.5.74

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Brazil SER, MAN, and PNR Groups

MR INTERNATIONAL STUDY BRAZIL GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	31	32,548	3,686	VAR 2	31	34,645	2,751	VAR 3	31	43,419	5,052
VAR 4	31	44,161	7,444	VAR 5	31	43,129	7,060	VAR 6	31	56,968	5,953
VAR 7	31	234,871	24,816	VAR 8	31	50,290	8,063	VAR 9	31	49,516	7,234
VAR10	31	54,516	6,271	VAR11	31	56,323	6,809	VAR12	31	56,742	6,899
VAR13	31	43,806	8,491	VAR14	31	311,194	30,910	VAR15	31	19,774	6,652
VAR16	31	23,355	8,898	VAR17	31	6,032	1,722	VAR18	0	0,000	0,000
VAR19	25	3,240	1,899	VAR20	22	2,545	1,471	VAR21	27	4,333	1,177
VAR22	27	4,704	0,823	VAR23	30	3,633	0,718	VAR24	31	2,935	1,063
VAR25	30	4,333	0,884	VAR26	31	3,677	1,249	VAR27	31	3,129	1,284
VAR28	30	1,900	0,759	VAR29	31	3,774	0,425	VAR30	30	3,433	0,679
VAR31	31	3,581	0,672	VAR32	31	1,839	1,157	VAR33	31	3,032	0,836
VAR34	30	3,433	0,774	VAR35	31	3,387	0,882	VAR36	30	3,800	0,610

MR INTERNATIONAL STUDY BRAZIL GR5 MAN

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	30	31,033	9,953	VAR 2	30	36,367	15,011	VAR 3	30	38,733	13,973
VAR 4	30	47,200	6,217	VAR 5	30	34,733	11,665	VAR 6	30	32,333	8,040
VAR 7	30	220,400	53,329	VAR 8	30	37,433	10,095	VAR 9	30	36,967	12,596
VAR10	30	39,767	12,224	VAR11	30	39,033	10,737	VAR12	30	39,433	12,128
VAR13	30	33,400	9,902	VAR14	30	226,033	65,582	VAR15	30	20,933	6,011
VAR16	30	20,500	7,637	VAR17	30	4,267	1,507	VAR18	0	0,000	0,000
VAR19	1	1,000	1,000	VAR20	30	1,033	0,183	VAR21	30	1,467	1,137
VAR22	30	3,467	1,196	VAR23	30	2,067	0,740	VAR24	30	3,467	0,937
VAR25	30	2,700	1,179	VAR26	30	4,033	0,964	VAR27	30	3,833	0,592
VAR28	30	2,867	1,008	VAR29	30	2,667	1,241	VAR30	30	2,667	1,093
VAR31	30	2,933	0,907	VAR32	30	2,600	1,037	VAR33	30	2,067	1,081
VAR34	30	2,600	0,968	VAR35	30	2,600	0,855	VAR36	30	3,100	0,960

MR INTERNATIONAL STUDY BRAZIL GR8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	29	31,448	13,136	VAR 2	29	34,793	13,337	VAR 3	29	39,000	13,283
VAR 4	29	46,379	9,356	VAR 5	29	32,000	7,339	VAR 6	29	36,690	12,765
VAR 7	29	220,310	62,049	VAR 8	29	37,483	11,731	VAR 9	29	36,103	12,622
VAR10	29	38,241	10,706	VAR11	29	38,931	11,253	VAR12	29	36,276	8,053
VAR13	29	36,241	11,795	VAR14	29	223,276	61,433	VAR15	29	19,690	4,737
VAR16	29	17,966	6,167	VAR17	29	4,379	1,613	VAR18	0	0,000	0,000
VAR19	29	3,483	0,911	VAR20	29	1,000	0,000	VAR21	29	1,517	1,090
VAR22	29	2,241	0,511	VAR23	29	2,310	0,850	VAR24	29	3,655	1,010
VAR25	29	2,621	0,979	VAR26	29	4,379	0,942	VAR27	29	3,759	0,786
VAR28	29	2,862	0,915	VAR29	29	2,759	1,244	VAR30	29	2,517	1,122
VAR31	29	3,069	0,753	VAR32	29	2,483	1,090	VAR33	29	1,897	0,860
VAR34	29	2,690	0,850	VAR35	29	2,724	0,841	VAR36	29	3,069	0,961

Table A.5.75

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Colombia SER, RST, and PMR Groups

MR INTERNATIONAL STUDY COLOMBIA GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	33	30,879	4,735	VAR 2	33	37,152	8,250	VAR 3	33	46,303	5,446
VAR 4	33	51,424	5,172	VAR 5	33	44,667	7,511	VAR 6	33	34,303	5,559
VAR 7	33	244,727	19,483	VAR 8	33	51,909	8,160	VAR 9	33	53,364	5,920
VAR10	33	55,121	3,951	VAR11	33	56,030	3,988	VAR12	33	85,394	7,075
VAR13	33	42,182	8,780	VAR14	33	314,000	22,669	VAR15	33	26,061	3,816
VAR16	33	29,939	4,493	VAR17	33	6,879	2,459	VAR18	33	4,333	1,291
VAR19	31	3,355	1,872	VAR20	31	2,839	1,614	VAR21	32	4,031	1,402
VAR22	33	4,242	1,251	VAR23	33	4,576	0,708	VAR24	33	2,333	0,924
VAR25	31	4,387	1,358	VAR26	33	3,515	1,503	VAR27	33	3,121	1,586
VAR28	32	2,406	0,946	VAR29	31	3,258	0,999	VAR30	32	3,375	0,793
VAR31	30	3,500	0,630	VAR32	32	2,531	1,244	VAR33	32	2,500	1,047
VAR34	33	3,576	0,561	VAR35	33	3,576	0,561	VAR36	29	4,414	0,733

MR INTERNATIONAL STUDY COLOMBIA GR2 RST

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	402	33,567	4,659	VAR 2	402	39,530	6,721	VAR 3	402	45,953	5,713
VAR 4	402	41,085	8,257	VAR 5	402	41,119	7,259	VAR 6	402	29,473	5,991
VAR 7	402	230,726	23,858	VAR 8	402	52,585	5,266	VAR 9	402	52,517	6,582
VAR10	402	54,896	5,423	VAR11	402	54,080	6,241	VAR12	402	54,358	6,980
VAR13	401	31,115	8,761	VAR14	402	299,473	25,134	VAR15	401	26,776	3,785
VAR16	398	30,058	4,718	VAR17	399	7,481	2,054	VAR18	348	2,126	1,363
VAR19	327	3,287	1,807	VAR20	350	1,243	0,773	VAR21	371	1,418	1,139
VAR22	341	1,830	1,183	VAR23	377	2,960	1,504	VAR24	401	2,414	0,999
VAR25	364	3,830	0,852	VAR26	402	3,577	1,389	VAR27	400	3,338	1,399
VAR28	400	2,497	0,942	VAR29	398	3,415	0,807	VAR30	399	3,316	0,761
VAR31	394	3,239	0,946	VAR32	398	2,726	1,195	VAR33	397	2,844	1,110
VAR34	400	3,542	0,837	VAR35	399	3,429	0,907	VAR36	387	4,300	0,807

MR INTERNATIONAL STUDY COLOMBIA GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	102	34,627	6,217	VAR 2	102	41,225	6,921	VAR 3	102	47,373	5,327
VAR 4	102	46,902	7,281	VAR 5	102	43,422	9,142	VAR 6	102	34,382	6,694
VAR 7	102	247,931	26,012	VAR 8	102	48,569	7,191	VAR 9	102	48,794	8,569
VAR10	102	52,265	7,423	VAR11	102	50,784	8,037	VAR12	101	50,832	9,385
VAR13	101	36,842	11,295	VAR14	102	287,225	36,676	VAR15	99	24,990	4,184
VAR16	100	27,690	5,428	VAR17	100	6,330	2,211	VAR18	92	3,793	1,641
VAR19	89	2,090	1,635	VAR20	91	1,033	0,180	VAR21	92	1,076	0,474
VAR22	92	4,043	1,540	VAR23	95	3,516	1,287	VAR24	102	3,294	1,020
VAR25	94	1,851	1,047	VAR26	99	4,020	1,237	VAR27	100	3,530	1,417
VAR28	100	2,430	0,987	VAR29	101	3,158	0,891	VAR30	102	2,980	0,844
VAR31	100	3,260	0,928	VAR32	100	2,440	1,131	VAR33	95	2,295	1,040
VAR34	99	3,283	1,011	VAR35	100	3,260	1,011	VAR36	96	4,354	1,036

Table A.5.76

Sample Sizes, Means, and Standard Deviations on 36 Variables for the ABS-MR Germany SER, RST,PMR, MAN, and PNR Groups

MR INTERNATIONAL STUDY GERMANY GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	147	38,728	10.283	VAR 2	147	27,673	4,554	VAR 3	147	37,408	9,847
VAR 4	147	48,626	4,770	VAR 5	147	44,633	6,828	VAR 6	147	37,000	5,445
VAR 7	147	234,068	15,379	VAR 8	147	47,782	5,948	VAR 9	147	44,878	8,517
VAR10	147	46,551	8,477	VAR11	147	50,626	6,127	VAR12	147	51,449	6,951
VAR13	147	47,741	11,179	VAR14	147	289,027	31,108	VAR15	147	19,585	4,892
VAR16	146	21,966	7,129	VAR17	147	6,177	2,579	VAR18	147	4,687	0,494
VAR19	147	2,551	1,844	VAR20	147	4,633	1,060	VAR21	147	4,354	1,019
VAR22	146	4,740	0,576	VAR23	146	4,637	0,524	VAR24	147	3,020	0,967
VAR25	146	4,932	0,450	VAR26	147	3,272	1,332	VAR27	147	3,122	1,318
VAR28	147	2,741	0,642	VAR29	146	3,178	0,721	VAR30	147	3,571	0,585
VAR31	147	3,143	0,776	VAR32	147	2,442	0,928	VAR33	147	3,306	0,698
VAR34	147	3,306	0,790	VAR35	147	3,245	0,818	VAR36	147	3,687	0,606

MR INTERNATIONAL STUDY GERMANY GR2 RST

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	74	29,446	4,857	VAR 2	74	32,419	5,437	VAR 3	74	48,905	4,119
VAR 4	74	42,662	6,899	VAR 5	74	35,216	5,367	VAR 6	74	31,351	9,383
VAR 7	74	220,000	19,540	VAR 8	74	44,068	7,775	VAR 9	74	43,784	8,786
VAR10	74	50,081	7,080	VAR11	74	48,486	6,907	VAR12	74	49,068	8,104
VAR13	74	32,162	7,232	VAR14	74	267,649	33,587	VAR15	74	23,297	2,946
VAR16	74	28,878	3,310	VAR17	74	8,797	1,850	VAR18	74	2,797	1,593
VAR19	74	2,149	1,619	VAR20	73	1,822	1,489	VAR21	74	1,797	1,293
VAR22	74	2,757	1,620	VAR23	74	3,649	1,039	VAR24	74	2,635	0,987
VAR25	74	4,946	0,281	VAR26	74	3,122	1,414	VAR27	73	2,808	1,391
VAR28	74	2,676	0,685	VAR29	74	3,162	0,703	VAR30	73	3,616	0,568
VAR31	74	3,054	0,826	VAR32	74	2,446	0,967	VAR33	74	3,297	0,677
VAR34	74	3,270	0,708	VAR35	73	3,233	0,736	VAR36	74	3,730	0,531

MR INTERNATIONAL STUDY GERMANY GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	144	33,257	5,685	VAR 2	144	33,389	5,594	VAR 3	144	47,292	4,696
VAR 4	144	46,951	5,846	VAR 5	144	39,639	5,137	VAR 6	144	36,410	4,791
VAR 7	144	236,938	16,433	VAR 8	144	46,097	6,488	VAR 9	144	45,778	6,759
VAR10	144	49,778	6,387	VAR11	144	46,854	7,521	VAR12	144	50,806	8,175
VAR13	144	38,771	8,690	VAR14	144	278,083	30,391	VAR15	144	24,806	2,900
VAR16	144	29,264	3,446	VAR17	144	6,403	2,204	VAR18	138	3,942	1,413
VAR19	138	1,855	1,550	VAR20	131	1,046	0,369	VAR21	137	1,204	0,841
VAR22	135	3,844	1,620	VAR23	139	4,036	1,282	VAR24	144	3,604	1,053
VAR25	143	1,406	0,929	VAR26	144	3,451	1,182	VAR27	144	3,257	1,321
VAR28	144	2,750	0,762	VAR29	144	3,125	0,852	VAR30	144	3,535	0,590
VAR31	144	3,361	0,772	VAR32	144	2,785	1,110	VAR33	142	2,775	1,068
VAR34	143	3,098	0,858	VAR35	144	3,069	0,936	VAR36	143	3,476	0,812

MR INTERNATIONAL STUDY GERMANY GR5 MAN

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	83	31,494	4,592	VAR 2	83	33,458	4,959	VAR 3	83	47,000	5,393
VAR 4	83	41,566	7,096	VAR 5	83	35,699	4,938	VAR 6	83	28,060	4,013
VAR 7	83	217,277	15,908	VAR 8	83	44,458	6,255	VAR 9	83	43,373	6,548
VAR10	83	49,699	5,824	VAR11	83	46,566	6,858	VAR12	83	49,120	7,929
VAR13	83	26,108	4,901	VAR14	83	259,325	25,700	VAR15	83	24,482	3,434
VAR16	83	30,024	2,627	VAR17	82	8,598	1,832	VAR18	80	2,675	1,448
VAR19	81	3,519	1,613	VAR20	82	1,049	0,217	VAR21	83	1,145	0,791
VAR22	83	1,867	1,267	VAR23	83	2,687	1,352	VAR24	83	2,651	0,671
VAR25	83	3,000	0,000	VAR26	83	2,867	0,823	VAR27	83	3,000	0,975
VAR28	83	2,831	0,762	VAR29	83	3,072	0,729	VAR30	83	3,687	0,492
VAR31	83	3,398	0,715	VAR32	83	2,518	1,004	VAR33	83	3,578	0,544
VAR34	83	3,446	0,737	VAR35	83	3,422	0,767	VAR36	82	3,732	0,608

MR INTERNATIONAL STUDY GERMANY GR6 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	69	36,058	6,474	VAR 2	69	36,406	6,220	VAR 3	69	46,072	5,585
VAR 4	69	39,783	8,205	VAR 5	69	40,000	5,466	VAR 6	69	28,188	4,735
VAR 7	69	226,507	23,220	VAR 8	69	43,478	7,942	VAR 9	69	43,203	8,190
VAR10	69	44,913	8,528	VAR11	69	41,696	9,644	VAR12	69	44,101	10,127
VAR13	69	29,174	9,889	VAR14	69	246,565	40,159	VAR15	69	25,710	3,387
VAR16	69	29,188	4,247	VAR17	69	6,826	2,029	VAR18	65	2,138	1,345
VAR19	63	3,159	1,833	VAR20	69	1,101	0,546	VAR21	69	1,261	0,918
VAR22	69	1,348	0,660	VAR23	69	2,116	1,491	VAR24	69	2,652	0,682
VAR25	68	1,118	0,561	VAR26	69	3,145	0,989	VAR27	69	2,870	1,349
VAR28	69	2,841	0,834	VAR29	69	3,087	0,903	VAR30	69	3,667	0,610
VAR31	69	3,217	0,968	VAR32	69	3,000	1,098	VAR33	69	2,478	1,066
VAR34	69	2,855	1,061	VAR35	69	2,754	1,104	VAR36	67	3,149	0,925

Table A.5.77

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Israel SER, PMR, PNR, and PRO Groups

MR INTERNATIONAL STUDY ISRAEL GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	74	32,541	4,835	VAR 2	74	35,514	7,310	VAR 3	75	41,893	7,216
VAR 4	75	43,507	7,957	VAR 5	75	40,280	8,597	VAR 6	75	31,413	6,224
VAR 7	75	224,240	29,610	VAR 8	74	45,135	7,854	VAR 9	74	43,635	10,604
VAR10	74	48,081	7,682	VAR11	74	47,905	9,660	VAR12	73	48,562	10,732
VAR13	74	36,135	10,103	VAR14	75	265,213	51,847	VAR15	74	26,324	4,584
VAR16	74	26,716	5,119	VAR17	74	5,797	2,433	VAR18	69	4,623	0,941
VAR19	57	2,877	1,928	VAR20	0	0,000	0,000	VAR21	58	3,121	1,326
VAR22	63	4,571	1,011	VAR23	64	4,359	0,897	VAR24	75	3,133	0,935
VAR25	68	3,309	0,553	VAR26	72	3,083	1,172	VAR27	73	2,699	1,255
VAR28	70	2,229	0,705	VAR29	71	3,479	0,652	VAR30	68	3,368	0,710
VAR31	70	3,829	0,450	VAR32	71	2,831	1,121	VAR33	58	1,914	0,756
VAR34	71	3,577	0,647	VAR35	72	3,569	0,728	VAR36	70	3,786	0,562

MR INTERNATIONAL STUDY ISRAEL GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	12	32,833	4,260	VAR 2	12	34,667	4,539	VAR 3	12	42,000	5,135
VAR 4	12	48,417	5,485	VAR 5	12	42,750	6,326	VAR 6	12	36,667	4,292
VAR 7	12	237,333	18,475	VAR 8	12	43,667	11,594	VAR 9	12	40,583	8,581
VAR10	12	46,250	8,677	VAR11	12	45,583	13,111	VAR12	11	49,000	7,759
VAR13	12	39,167	12,127	VAR14	12	260,167	61,427	VAR15	12	24,167	5,271
VAR16	12	26,917	4,209	VAR17	12	5,833	1,467	VAR18	12	4,583	0,669
VAR19	9	2,333	1,658	VAR20	0	0,000	0,000	VAR21	9	2,556	1,878
VAR22	11	4,455	1,036	VAR23	8	4,250	0,886	VAR24	12	3,833	1,030
VAR25	11	3,000	1,183	VAR26	12	3,167	0,577	VAR27	12	2,917	0,900
VAR28	12	2,333	0,778	VAR29	12	3,417	0,669	VAR30	12	3,583	0,515
VAR31	12	3,667	0,492	VAR32	12	3,250	0,965	VAR33	10	1,800	0,632
VAR34	12	3,917	0,289	VAR35	12	3,833	0,389	VAR36	12	3,667	0,778

MR INTERNATIONAL STUDY ISRAEL GR8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	44	32,500	4,643	VAR 2	44	34,409	4,707	VAR 3	44	40,727	5,359
VAR 4	44	39,773	6,459	VAR 5	44	38,727	8,689	VAR 6	44	26,318	5,175
VAR 7	44	212,455	19,647	VAR 8	44	43,045	6,401	VAR 9	44	43,068	8,992
VAR10	44	47,886	6,571	VAR11	44	48,250	7,336	VAR12	44	47,409	9,186
VAR13	44	26,227	6,317	VAR14	44	255,886	28,158	VAR15	43	24,349	3,664
VAR16	42	26,786	4,209	VAR17	43	6,651	2,298	VAR18	33	3,121	1,341
VAR19	31	3,065	1,931	VAR20	0	0,000	0,000	VAR21	33	1,576	1,251
VAR22	33	1,939	1,248	VAR23	38	2,237	1,441	VAR24	44	3,023	0,731
VAR25	44	3,432	0,873	VAR26	44	3,136	0,852	VAR27	42	2,857	0,899
VAR28	42	2,286	0,742	VAR29	44	3,409	0,658	VAR30	43	3,488	0,631
VAR31	44	3,795	0,408	VAR32	44	2,818	0,995	VAR33	38	2,079	0,712
VAR34	43	3,465	0,855	VAR35	43	3,558	0,825	VAR36	41	3,707	0,680

MR INTERNATIONAL STUDY ISRAEL GR9 PRO

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	23	33,304	5,414	VAR 2	23	35,087	4,935	VAR 3	23	41,174	4,877
VAR 4	23	39,043	6,357	VAR 5	23	40,478	7,360	VAR 6	22	27,864	5,148
VAR 7	23	215,739	18,767	VAR 8	23	44,739	4,788	VAR 9	23	44,348	6,278
VAR10	23	49,913	5,768	VAR11	23	49,304	7,784	VAR12	23	48,565	7,827
VAR13	22	27,773	8,292	VAR14	23	263,435	28,231	VAR15	22	24,773	3,915
VAR16	22	28,136	3,733	VAR17	23	6,130	1,714	VAR18	20	3,050	1,538
VAR19	20	3,500	1,762	VAR20	0	0,000	0,000	VAR21	19	1,632	1,499
VAR22	21	2,000	1,225	VAR23	21	2,810	1,721	VAR24	23	3,565	0,843
VAR25	23	3,957	0,976	VAR26	23	2,957	0,638	VAR27	23	2,565	0,992
VAR28	23	2,043	0,706	VAR29	23	3,522	0,730	VAR30	23	3,870	0,344
VAR31	22	3,864	0,468	VAR32	23	2,870	1,180	VAR33	17	1,647	0,493
VAR34	23	3,174	0,984	VAR35	23	3,522	0,730	VAR36	22	3,955	0,213

Table A.5.78

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Yugoslavia PMR and PNR Groups

MR INTERNATIONAL STUDY YUGO GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	50	33,560	5,956	VAR 2	50	43,920	5,587	VAR 3	50	48,680	5,303
VAR 4	50	45,260	5,760	VAR 5	50	43,840	9,148	VAR 6	50	36,160	4,917
VAR 7	50	251,420	19,708	VAR 8	50	45,820	5,920	VAR 9	50	46,440	6,228
VAR10	50	50,420	6,749	VAR11	50	47,380	7,039	VAR12	50	46,800	8,640
VAR13	50	40,040	7,426	VAR14	50	276,900	28,056	VAR15	50	27,660	3,249
VAR16	50	29,600	3,037	VAR17	50	5,980	2,386	VAR18	50	4,840	8,792
VAR19	50	1,240	0,960	VAR20	50	1,260	0,965	VAR21	50	1,360	1,064
VAR22	49	4,878	0,634	VAR23	50	4,000	0,404	VAR24	50	3,280	8,809
VAR25	50	2,580	1,230	VAR26	50	2,400	1,030	VAR27	50	2,280	1,031
VAR28	50	1,980	0,937	VAR29	50	3,020	0,820	VAR30	50	2,980	8,869
VAR31	49	3,327	0,591	VAR32	50	2,720	0,882	VAR33	49	1,959	0,789
VAR34	50	2,940	0,740	VAR35	50	3,080	0,724	VAR36	50	3,340	8,917

MR INTERNATIONAL STUDY YUGO GR8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	49	32,755	5,077	VAR 2	49	42,490	5,959	VAR 3	49	46,224	4,886
VAR 4	49	42,469	6,484	VAR 5	49	39,571	5,737	VAR 6	49	29,796	3,942
VAR 7	49	233,306	16,771	VAR 8	49	47,612	8,592	VAR 9	49	47,531	8,583
VAR10	49	50,306	6,908	VAR11	49	48,571	8,254	VAR12	49	46,469	9,832
VAR13	49	30,224	6,282	VAR14	49	270,714	36,682	VAR15	49	26,286	2,700
VAR16	49	30,367	3,604	VAR17	49	7,102	2,143	VAR18	26	2,962	1,661
VAR19	26	3,346	1,917	VAR20	26	2,115	1,796	VAR21	41	1,463	1,286
VAR22	46	1,891	1,524	VAR23	49	2,000	1,307	VAR24	49	3,143	0,736
VAR25	49	3,469	0,868	VAR26	49	2,796	1,060	VAR27	49	2,408	1,059
VAR28	49	1,898	0,848	VAR29	48	3,000	0,744	VAR30	49	3,061	0,809
VAR31	49	3,306	0,508	VAR32	48	2,625	0,761	VAR33	49	2,286	0,787
VAR34	48	2,708	0,713	VAR35	48	2,750	0,636	VAR36	48	3,292	0,922

Table A.5.79

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Kentucky SER, RST, and MAN Groups

MR INTERNATIONAL STUDY KENTUCKY GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	50	26,880	4,114	VAR 2	50	31,080	5,656	VAR 3	50	44,940	5,471
VAR 4	50	46,740	6,904	VAR 5	50	43,020	7,358	VAR 6	50	34,700	5,388
VAR 7	50	227,360	15,774	VAR 8	50	48,400	6,649	VAR 9	50	47,240	7,657
VAR10	50	49,000	7,936	VAR11	50	52,760	6,745	VAR12	50	51,860	7,982
VAR13	50	44,680	8,355	VAR14	50	293,940	32,785	VAR15	50	22,920	2,986
VAR16	50	29,700	3,424	VAR17	50	8,820	2,430	VAR18	48	4,708	0,874
VAR19	48	2,271	1,710	VAR20	49	3,816	1,603	VAR21	50	4,200	1,309
VAR22	50	4,700	0,863	VAR23	50	4,740	0,487	VAR24	50	2,980	1,169
VAR25	49	4,245	0,778	VAR26	50	4,320	0,957	VAR27	50	3,640	1,120
VAR28	50	2,620	0,697	VAR29	50	2,920	0,966	VAR30	49	3,184	0,782
VAR31	50	3,340	0,917	VAR32	50	2,560	1,215	VAR33	50	2,780	0,887
VAR34	50	2,940	1,114	VAR35	50	2,580	1,126	VAR36	50	2,980	0,742

MR INTERNATIONAL STUDY KENTUCKY GR2 RST

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	54	29,370	4,822	VAR 2	54	32,796	6,817	VAR 3	54	40,556	6,123
VAR 4	54	39,815	6,746	VAR 5	54	37,241	7,289	VAR 6	54	32,148	5,941
VAR 7	54	211,926	24,487	VAR 8	54	41,889	6,442	VAR 9	54	41,870	7,884
VAR10	54	46,056	7,649	VAR11	54	47,630	7,061	VAR12	54	48,407	7,735
VAR13	54	35,833	8,398	VAR14	54	261,685	30,564	VAR15	54	23,074	3,791
VAR16	54	27,463	5,105	VAR17	53	8,792	2,196	VAR18	53	3,151	1,511
VAR19	52	2,538	1,709	VAR20	53	1,736	1,129	VAR21	53	2,094	1,497
VAR22	53	2,679	1,541	VAR23	53	3,302	1,102	VAR24	54	3,000	1,133
VAR25	54	4,833	0,541	VAR26	54	4,167	0,986	VAR27	52	4,000	0,929
VAR28	54	2,667	0,727	VAR29	54	2,852	0,787	VAR30	53	3,415	0,643
VAR31	54	3,241	0,845	VAR32	54	2,222	0,984	VAR33	54	2,611	0,712
VAR34	54	3,352	0,805	VAR35	54	2,889	0,904	VAR36	53	2,962	0,733

MR INTERNATIONAL STUDY KENTUCKY GR3 MAN

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	20	30,800	4,162	VAR 2	20	35,050	7,338	VAR 3	20	42,300	4,143
VAR 4	20	43,900	7,055	VAR 5	20	37,350	11,268	VAR 6	19	31,632	3,273
VAR 7	20	219,450	25,308	VAR 8	20	41,900	6,640	VAR 9	20	41,150	7,520
VAR10	20	47,800	8,563	VAR11	20	50,050	8,525	VAR12	20	46,350	13,472
VAR13	19	35,895	8,425	VAR14	20	261,350	43,741	VAR15	20	22,950	3,993
VAR16	20	27,200	3,750	VAR17	19	7,579	2,795	VAR18	19	3,526	1,307
VAR19	19	3,211	1,584	VAR20	19	1,526	1,264	VAR21	19	1,842	1,500
VAR22	19	2,842	1,302	VAR23	19	3,421	1,261	VAR24	20	4,150	0,988
VAR25	20	4,300	0,923	VAR26	20	4,400	0,681	VAR27	20	4,150	0,813
VAR28	20	2,600	0,821	VAR29	20	2,800	0,894	VAR30	20	3,450	0,826
VAR31	20	3,550	0,686	VAR32	20	2,000	1,170	VAR33	19	2,421	0,961
VAR34	20	3,250	1,020	VAR35	20	2,550	1,099	VAR36	20	2,850	0,489

Table A.5.80

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Michigan PMR and PNR Groups

MR INTERNATIONAL STUDY MICHIGAN GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	41	33,976	6,006	VAR 2	41	37,707	8,945	VAR 3	41	44,561	5,887
VAR 4	41	48,561	7,658	VAR 5	41	41,293	5,989	VAR 6	41	38,415	5,293
VAR 7	41	244,512	25,145	VAR 8	41	41,927	8,601	VAR 9	41	40,415	9,119
VAR10	41	46,220	9,177	VAR11	41	49,195	8,259	VAR12	41	48,707	10,235
VAR13	41	43,561	9,960	VAR14	41	270,024	40,055	VAR15	41	23,780	2,565
VAR16	41	27,707	3,371	VAR17	41	8,073	1,942	VAR18	40	4,350	1,272
VAR19	41	1,976	1,739	VAR20	39	1,333	0,838	VAR21	40	1,525	1,381
VAR22	40	4,350	1,350	VAR23	39	4,231	1,245	VAR24	41	3,366	0,859
VAR25	41	3,390	0,771	VAR26	41	4,220	0,822	VAR27	41	3,976	1,012
VAR28	41	2,585	0,805	VAR29	41	2,902	0,800	VAR30	41	3,268	0,742
VAR31	41	3,195	0,813	VAR32	41	2,390	1,202	VAR33	41	2,537	0,809
VAR34	41	2,780	0,909	VAR35	41	2,854	0,882	VAR36	40	3,075	0,656

MR INTERNATIONAL STUDY MICHIGAN GR8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	33	32,727	5,404	VAR 2	33	32,273	4,732	VAR 3	33	41,636	4,955
VAR 4	33	44,576	7,319	VAR 5	33	36,424	8,058	VAR 6	33	30,879	4,428
VAR 7	33	218,515	17,447	VAR 8	33	40,273	6,409	VAR 9	33	39,030	6,307
VAR10	33	42,182	7,448	VAR11	33	47,242	7,734	VAR12	33	44,727	9,335
VAR13	33	35,182	8,361	VAR14	33	248,636	29,990	VAR15	33	22,545	2,017
VAR16	33	27,636	3,507	VAR17	33	8,697	1,912	VAR18	33	3,364	1,342
VAR19	32	3,250	1,832	VAR20	32	1,719	1,397	VAR21	33	2,030	1,667
VAR22	33	2,727	1,464	VAR23	32	3,344	1,473	VAR24	33	2,485	1,302
VAR25	33	3,364	0,653	VAR26	33	4,455	0,666	VAR27	33	3,970	0,951
VAR28	33	2,636	0,699	VAR29	33	2,848	0,667	VAR30	33	3,242	0,614
VAR31	33	3,121	0,820	VAR32	33	2,485	1,034	VAR33	33	2,727	0,944
VAR34	33	2,848	0,755	VAR35	33	2,697	0,728	VAR36	33	3,061	0,556

Table A.5.81

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR Texas SER, RST, PMR, PNR Groups

MR INTERNATIONAL STUDY TEXAS GR1 SER

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	50	31,400	4,673	VAR 2	50	34,700	5,262	VAR 3	50	43,980	7,238
VAR 4	50	46,300	6,225	VAR 5	50	43,500	6,637	VAR 6	50	34,880	6,140
VAR 7	50	234,760	20,182	VAR 8	50	43,420	9,581	VAR 9	50	40,100	10,899
VAR10	50	44,920	10,719	VAR11	50	46,580	11,205	VAR12	50	50,000	10,420
VAR13	50	43,380	10,713	VAR14	50	268,400	50,370	VAR15	50	23,220	3,119
VAR16	50	28,260	4,840	VAR17	50	8,240	2,191	VAR18	50	4,220	1,130
VAR19	50	2,940	1,953	VAR20	50	4,040	1,261	VAR21	50	3,980	1,332
VAR22	50	3,940	1,219	VAR23	50	4,700	0,707	VAR24	50	2,260	0,600
VAR25	50	4,400	0,904	VAR26	50	4,260	0,853	VAR27	50	3,700	1,555
VAR28	50	2,420	0,810	VAR29	50	3,180	0,774	VAR30	50	2,480	0,974
VAR31	50	3,120	0,849	VAR32	50	2,840	1,095	VAR33	50	2,620	0,945
VAR34	50	3,020	0,795	VAR35	50	3,160	0,889	VAR36	50	2,600	0,495

MR INTERNATIONAL STUDY TEXAS GR2 RST

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	48	35,750	6,948	VAR 2	48	34,646	7,260	VAR 3	48	42,979	6,635
VAR 4	48	44,396	7,745	VAR 5	48	40,021	7,600	VAR 6	48	32,458	9,139
VAR 7	48	230,250	25,945	VAR 8	48	41,875	7,417	VAR 9	48	41,604	9,473
VAR10	48	44,292	9,232	VAR11	48	48,021	8,618	VAR12	48	47,667	10,791
VAR13	48	4,833	11,453	VAR14	48	258,292	37,779	VAR15	48	21,479	5,049
VAR16	48	24,688	6,761	VAR17	48	7,750	2,694	VAR18	48	2,333	1,484
VAR19	48	3,042	1,856	VAR20	48	1,208	0,824	VAR21	48	1,396	1,180
VAR22	48	1,750	1,212	VAR23	48	3,000	1,502	VAR24	48	2,729	0,939
VAR25	48	4,938	0,245	VAR26	48	4,208	0,898	VAR27	48	3,958	1,288
VAR28	48	2,396	0,869	VAR29	48	3,250	0,700	VAR30	48	2,875	0,761
VAR31	48	3,521	0,583	VAR32	48	3,083	1,007	VAR33	48	2,479	0,989
VAR34	48	3,271	0,818	VAR35	48	3,125	0,937	VAR36	48	2,542	0,504

MR INTERNATIONAL STUDY TEXAS GR4 PMR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	49	35,061	7,007	VAR 2	49	39,776	8,905	VAR 3	49	46,939	4,548
VAR 4	49	49,327	3,944	VAR 5	49	42,776	6,995	VAR 6	49	39,776	5,931
VAR 7	49	253,653	23,064	VAR 8	49	46,980	8,992	VAR 9	49	45,592	9,550
VAR10	49	48,245	7,614	VAR11	49	48,286	8,039	VAR12	49	48,959	10,788
VAR13	49	46,592	10,273	VAR14	49	284,653	39,263	VAR15	49	24,020	2,757
VAR16	49	27,755	3,892	VAR17	49	7,633	2,643	VAR18	49	4,245	1,128
VAR19	49	2,041	1,707	VAR20	49	1,204	0,645	VAR21	49	1,571	1,307
VAR22	49	4,429	0,935	VAR23	49	4,633	0,487	VAR24	49	3,367	0,929
VAR25	49	2,959	0,841	VAR26	49	4,245	1,090	VAR27	49	3,837	1,375
VAR28	49	2,388	0,837	VAR29	49	3,184	0,755	VAR30	49	2,408	0,762
VAR31	49	3,184	0,635	VAR32	49	2,939	1,029	VAR33	49	2,163	1,087
VAR34	49	2,980	0,803	VAR35	49	2,816	0,950	VAR36	49	2,633	0,487

MR INTERNATIONAL STUDY TEXAS GR8 PNR

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	76	33,605	4,986	VAR 2	76	34,145	5,858	VAR 3	76	43,079	5,837
VAR 4	76	43,934	7,234	VAR 5	76	40,447	6,461	VAR 6	76	39,987	6,273
VAR 7	76	225,197	23,503	VAR 8	76	41,539	8,286	VAR 9	76	42,000	9,971
VAR10	76	45,658	9,476	VAR11	76	46,987	9,346	VAR12	76	47,026	8,923
VAR13	76	34,421	10,241	VAR14	76	257,632	41,131	VAR15	76	23,211	2,763
VAR16	76	28,118	4,293	VAR17	76	8,013	2,023	VAR18	76	2,947	1,540
VAR19	75	2,947	1,859	VAR20	76	1,434	1,075	VAR21	76	1,697	1,405
VAR22	74	2,365	1,439	VAR23	76	3,382	1,356	VAR24	76	2,776	0,776
VAR25	76	3,697	1,033	VAR26	75	4,347	0,966	VAR27	76	4,000	1,265
VAR28	76	2,342	0,960	VAR29	76	3,158	0,895	VAR30	76	2,934	0,789
VAR31	76	3,263	0,772	VAR32	76	2,487	1,172	VAR33	73	2,795	0,881
VAR34	76	3,184	0,812	VAR35	76	3,171	0,773	VAR36	76	2,566	0,789

Table A.5.82

Sample Sizes, Means, and Standard Deviations on 36
Variables for the ABS-MR School Diagnosticians, Females, Males, & Total Groups

MR INTERNATIONAL STUDY SPECIAL GROUPS GR7 PSY[1]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	34	27.794	4.298	VAR 2	34	34.088	6.851	VAR 3	34	49.294	4.072
VAR 4	34	49.559	5.785	VAR 5	34	40.853	6.625	VAR 6	34	35.176	6.225
VAR 7	34	236.765	16.960	VAR 8	34	44.382	6.462	VAR 9	34	42.853	8.217
VAR10	34	48.882	6.696	VAR11	34	49.412	5.935	VAR12	34	51.382	7.734
VAR13	34	43.029	9.932	VAR14	34	279.941	30.292	VAR15	34	24.765	3.473
VAR16	34	28.588	3.183	VAR17	34	11.000	1.938	VAR18	34	4.000	1.128
VAR19	34	2.912	1.747	VAR20	33	3.576	1.640	VAR21	33	4.182	1.334
VAR22	34	3.559	1.397	VAR23	34	4.412	0.609	VAR24	34	2.853	0.857
VAR25	34	4.882	0.686	VAR26	34	3.735	1.053	VAR27	34	3.324	1.036
VAR28	34	2.618	0.604	VAR29	34	2.941	0.694	VAR30	34	3.412	0.500
VAR31	34	3.206	1.008	VAR32	34	2.147	0.892	VAR33	34	2.735	0.710
VAR34	34	3.265	0.864	VAR35	34	3.029	1.087	VAR36	34	3.294	0.579

MR INTERNATIONAL STUDY ALL FEMALES[2]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	1943	35.382	7.577	VAR 2	1943	36.751	7.483	VAR 3	1944	42.740	7.507
VAR 4	1944	42.375	8.074	VAR 5	1944	41.041	7.346	VAR 6	1944	32.646	7.088
VAR 7	1944	230.898	23.107	VAR 8	1943	45.336	8.334	VAR 9	1943	44.783	9.181
VAR10	1943	47.201	8.585	VAR11	1943	46.741	9.660	VAR12	1941	48.886	9.278
VAR13	1941	38.866	11.006	VAR14	1944	271.583	36.535	VAR15	1941	22.550	4.947
VAR16	1938	26.306	5.555	VAR17	1936	7.004	2.579	VAR18	1782	3.002	1.683
VAR19	1748	2.818	1.829	VAR20	1292	1.800	1.447	VAR21	1760	1.904	1.525
VAR22	1795	2.671	1.648	VAR23	1866	3.374	1.431	VAR24	1941	2.298	1.106
VAR25	1883	3.516	1.175	VAR26	1935	3.903	1.176	VAR27	1931	3.516	1.315
VAR28	1931	2.474	0.859	VAR29	1933	3.176	0.804	VAR30	1925	3.187	0.802
VAR31	1923	3.271	0.779	VAR32	1932	2.508	1.082	VAR33	1905	2.585	0.988
VAR34	1929	3.106	0.898	VAR35	1924	3.024	0.921	VAR36	1893	3.352	0.990

MR INTERNATIONAL STUDY ALL MALES[2]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	1139	35.617	7.890	VAR 2	1139	36.451	7.880	VAR 3	1139	43.655	7.732
VAR 4	1139	43.284	8.023	VAR 5	1139	41.169	7.275	VAR 6	1137	33.565	6.987
VAR 7	1139	233.683	25.122	VAR 8	1139	47.049	7.826	VAR 9	1139	45.537	8.622
VAR10	1139	48.872	8.364	VAR11	1139	47.997	9.198	VAR12	1138	50.054	8.682
VAR13	1137	39.369	11.191	VAR14	1139	278.766	36.394	VAR15	1134	23.004	5.189
VAR16	1133	26.876	5.785	VAR17	1132	7.168	2.588	VAR18	1046	3.061	1.588
VAR19	1086	3.141	1.756	VAR20	904	1.844	1.502	VAR21	1081	2.076	1.633
VAR22	1101	2.725	1.602	VAR23	1110	3.491	1.324	VAR24	1138	2.646	1.141
VAR25	1110	3.681	1.233	VAR26	1136	3.621	1.242	VAR27	1135	3.377	1.263
VAR28	1136	2.548	0.849	VAR29	1133	3.229	0.810	VAR30	1136	3.257	0.858
VAR31	1133	3.335	0.820	VAR32	1132	2.457	1.124	VAR33	1120	2.849	0.984
VAR34	1132	3.244	0.883	VAR35	1135	3.165	0.920	VAR36	1120	3.442	0.911

MR INTERNATIONAL STUDY TOTAL[2]

NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV	NAME	N	MEAN	STD DEV
VAR 1	3111	35.444	7.704	VAR 2	3111	36.647	7.632	VAR 3	3113	43.067	7.599
VAR 4	3112	42.690	8.078	VAR 5	3110	41.089	7.306	VAR 6	3108	32.958	7.055
VAR 7	3113	231.743	24.346	VAR 8	3111	45.929	8.218	VAR 9	3111	45.057	8.930
VAR10	3112	47.796	8.548	VAR11	3111	47.196	9.518	VAR12	3106	49.280	9.081
VAR13	3105	39.041	11.088	VAR14	3113	273.985	36.986	VAR15	3102	22.698	5.044
VAR16	3098	26.492	5.671	VAR17	3092	7.057	2.580	VAR18	2850	3.016	1.587
VAR19	2855	2.942	1.807	VAR20	2214	1.816	1.466	VAR21	2864	1.968	1.567
VAR22	2916	2.688	1.629	VAR23	3000	3.412	1.394	VAR24	3097	2.426	1.131
VAR25	3015	3.574	1.199	VAR26	3095	3.799	1.210	VAR27	3090	3.466	1.298
VAR28	3092	2.499	0.858	VAR29	3087	3.196	0.809	VAR30	3085	3.208	0.827
VAR31	3080	3.289	0.801	VAR32	3086	2.487	1.099	VAR33	3046	2.681	0.994
VAR34	3084	3.154	0.897	VAR35	3083	3.072	0.925	VAR36	3037	3.381	0.964

[1]School Diagnosticians

[2]Includes three test development samples.

Table A.5.83

Simplex Results of Three Samples on the ABS-MR

1	--					
2	08	--				
3	43	43	--			$OQ^2 = .77$
4	05	09	11	--		
5	25	04	12	40	--	
6	26	05	15	09	37	--
	1	2	3	4	5	6

	--					
	19	--				
	24	54	--			$BQ^2 = .86$
	01	09	07	--		
	02	06	05	31	--	
	04	02	07	04	12	--
	1	2	3	4	5	6

SER Total (384)

1	--					
2	09	--				
3	12	18	--			$OQ^2 = .68$
4	15	09	21	--		
5	17	23	19	41	--	
6	23	38	04	04	07	--
	1	2	3	4	5	6

	--					
	21	--				
	19	41	--			
	12	15	17	--		$BQ^2 = .90$
	18	09	23	09	--	
	04	04	07	23	38	--
	1	2	3	4	5	6

RST Total (1093)

1	--					
2	40	--				
3	18	27	--			$OQ^2 = .91$
4	17	14	30	--		
5	27	28	21	21	--	
6	03	04	03	08	28	--
	1	2	3	4	5	6

	--					
	40	--				
	18	27	--			$BQ^2 =$
	27	28	21	--		
	17	14	30	21	--	
	03	04	03	08	28	--
	1	2	3	4	5	6

PMR Total (398)

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[1]Complete results for all groups will be contained in the forthcoming book (see page ii).

A P P E N D I X A.6

Code Book

CODE BOOK*

CROSS-CULTURAL ATTITUDES TOWARD MENTAL RETARDATION: CONTENT, STURCTURE, AND DETERMINANTS

John E. Jordan
College of Education
Michigan State University
July 1, 1968

INSTRUCTIONS FOR USE OF THIS CODE BOOK

1. Code 0 for a one column no response, or 00 for a two column no response, or 000 for a three column no response will mean there was No Information, Respondent did not answer, or not Applicable.

2. In each case in the following pages the column to the left contains the column number of the IBM card; the second column contains the question number from the questionnaire; the third column(item detail) contains an abbreviated form of the item; and the fourth column contains the code within each column of the IBM card with an explanation of the code.

3. Coder instructions always follow a line across the page and are clearly indicated.

---

*This code book contains directions for scoring the 3968 version of the Attitude Behavior Scale: Mental Retardation(ABS-MR). It is specifically for the United States sample and limited modifications and/or additions are made in certain nations and/or states. Special instructions are devised for each study and must be consulted before scoring that sample.

Code Book

1

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
1,2	face sheet	nation/state	01-19 United States
			01- Michigan
			02- Kentucky
			03- Georgia
			20-29 Western Europe
			20- Germany
			21- Denmark
			30-39 Eastern Europe
			30- Yugoslavia
			31- Poland
			32- Czechoslovakia
			40-49 Middle East
			40- Israel
			41- Iran
			42- Turkey
			50-59 Far East
			50- India
			51- Japan
			60-79 Latin America
			60- Belize(British Honduras)
			61- Colombia
			62- Brazil
			63- Venzuela
			64- Costa Rica

Code Book

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
3,4	face sheet	Group No.[1]	Administration group[4]
			01 to 15 } Class sections of MSU Ed. 200, Jan.1968
			16 MSU Medical class Dec.1967
5-7	ABS-MR	Subject No.	001 to 999 Assign at time of Administration
8	ABS-MR	Card No.	1 Scale 1 plus constants[2] 2 Scale 2 plus constants 3 Scale 3 plus constants 4 Scale 4 plus constants 5 Scale 5 plus constants 6 Scale 6 plus constants 7 Life and MR scales plus contants
9	ABS-MR Q81[3]	Sex	1 female 2 male

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[1]See Special Instructions sheet for each nation and/or study to ascertain group no. identification. Also see Card 7, col. 70, 71 footnote.

[2]Constants refer to first 35 columns of each card. See Card 1 for nature of these 35 columns.

[3]See page 21 of the U.S. 3968 version of the ABS-MR scale.

[4]See col. 80 (of all 7 cards) for "interest" or occupational group number. Also see Special Instructions for each study and/or nation.

Code Book

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
10	ABS-MR Q-82	age	1 Under 20 2 21 - 30 3 31 - 40 4 41 - 50 5 50 - over
11	ABS-MR Q-83	Educ. Exper. (kind)	1 None 2 Elem. 3 Sec. 4 Univ. 5 Other
12	ABS-MR Q-84	Marital Status	1 Married 2 Single 3 Divorced 4 Widowed 5 Separated
13	ABS-MR Q-85	Religion (affiliation)	1 Refuse 2 Catholic 3 Protestant 4 Jewish 5 Other
14	ABS-MR Q-86	Religion (importance)	1 Refuse 2 None 3 Not very 4 Fairly 5 Very
15	ABS-MR Q-87	Education (amount)	1 6 yrs./less 2 9 yrs./less 3 12 yrs./less 4 Some univ. 5 Degree
16	ABS-MR Q-88	Self Change	1 Very difficult 2 Slightly difficult 3 Easy 4 Very easy

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ABS-MR-Card 1

Code Book

Col.	Scale/Item	Item Detail	Code
17	ABS-MR Q-89	Child rearing practices	1 strongly disagree 2 slightly disagree 3 slightly agree 4 strongly agree
18	ABS-MR Q-90	Birth Control	1 Always wrong 2 Usually wrong 3 Probably right 4 Always right
19	ABS-MR Q-91	Automation	1 strongly disagree 2 slightly disagree 3 slightly agree 4 strongly agree
20	ABS-MR Q-92	Political leaders	1 strongly disagree 2 slightly disagree 3 slightly agree 4 strongly agree
21	ABS-MR Q-93	Aid educ. (local)	1 strongly disagree 2 slightly disagree 3 slightly agree 4 strongly agree
22	ABS-MR Q-94	Aid educ. (national)	1 strongly disagree 2 slightly disagree 3 slightly agree 4 strongly agree
23	ABS-MR Q-95	Educ. plan.	1 Church 2 Parents 3 Local 4 National
24	ABS-MR Q-96	Religion (adherence)	1 Refuse 2 None 3 Sometimes 4 Usually 5 Almost always

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Code Book

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
25	ABS-MR Q-97	Rules (follow)	1 agree strongly 2 agree slightly 3 disagree slightly 4 disagree strongly
26	ABS-MR Q-HP-98	HP Contact (Category)	1 blind 2 deaf 3 crippled 4 M.R. 5 E.D.P.
27	ABS-MR Q-HP-99	HP Contact (nature)	1 studied 2 relative 3 worked with 4 self HP
28	ABS-MR Q-HP-100	HP Contact (amount)	1 less 10 2 10 - 50 3 50 - 100 4 100 - 500 5 500 - +
29	ABS-MR Q-HP-101	HP Contact (avoid)	1 could not 2 very difficult 3 considerably difficult 4 inconvenient 5 could avoid
30	ABS-MR Q-HP-102	HP Contact (gain)	1 No 2 Paid 3 Credit 4 Gain & credit
31	ABS-MR Q-HP-103	HP Contact (% income)	1 no reward 2 less 25% 3 26 - 50% 4 51 - 75% 5 75% - over

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ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
32	ABS-MR Q-HP-104	HP Contact (alternatives)	1 no work 2 none 3 not acceptable 4 not quite 5 acceptable
33	ABS-MR Q-HP-105	MR Contact (amount)	1 less 10 2 10-50 3 50-100 4 100-500 5 500-+
34	ABS-MR Q-HP-106	MR Contact (enjoy)	1 no experience 2 disliked 3 not much 4 liked some 5 enjoyed
35	Constant no. (i.e., 1) required here re computer program.		
36	Scale I[2]-Q 1	Energy - C[1]	1 less 2 same 3 more
37	Scale I -O 2	Energy - I[1]	1 not sure 2 fairly sure 3 sure
38	Scale I - Q 3	School work - C	1 less 2 same 3 more

[1] The letters "C" and "I" refer to content and intensity respectively, to differentiate the two answers to each question.

[2] See page 2 of the U.S. 3968 version of the ABS-MR scale.

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
39	Scale I - Q 4	School Work - I	1 not sure 2 fairly sure 3 sure
40	Scale I - Q 5	Memory - C	1 not as good 2 same 3 better
41	Scale I - Q 6	Memory - I	1 not sure 2 fairly sure 3 sure
42	Scale I - Q 7	Unusual sex - C	1 more 2 same 3 less
43	Scale I - Q 8	Unusual sex - I	1 not sure 2 fairly sure 3 sure
44	Scale I - Q 9	Good marriage - C	1 less 2 same 3 more
45	Scale I - Q 10	Good marriage - I	1 not sure 2 fairly sure 3 sure
46	Scale I - Q 11	Many children - C	1 more 2 same 3 less
47	Scale I - Q 12	Many children - I	1 not sure 2 fairly sure 3 sure
48	Scale I - Q 13	Faithful-spouse-C	1 less 2 same 3 more

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ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
49	Scale I - Q 14	Faithful-spouse- I	1 not sure 2 fairly sure 3 sure
50	Scale I - Q 15	Care of children - C	1 less 2 same 3 better
51	Scale I - Q 16	Care of children - I	1 not sure 2 fairly sure 3 sure
52	Scale I - Q 17	Obey law - C	1 less 2 same 3 more
53	Scale I - Q 18	Obey law - I	1 not sure 2 fairly sure 3 sure
54	Scale I - Q 19	Steady work - C	1 less 2 same 3 more
55	Scale I - Q 20	Steady work - I	1 not sure 2 fairly sure 3 sure
56	Scale I - Q 21	Works hard - C	1 not as much 2 same 3 more
57	Scale I - Q 22	Works hard - I	1 not sure 2 fairly sure 3 sure
58	Scale I - Q 23	Plans future - C	1 not as likely 2 same 3 more

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Code Book

ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
59	Scale I - Q 24	Plans future - I	1 not sure 2 fairly sure 3 sure
60	Scale I - Q 25	Fun now - C	1 more so 2 same 3 less so
61	Scale I - Q 26	Fun now - I	1 not sure 2 fairly sure 3 sure
62	Scale I - Q 27	Cruel - C	1 more 2 same 3 less
63	Scale I - Q 28	Cruel - I	1 not sure 2 fairly sure 3 sure
64	Scale I - Q 29	Sexually loose - C	1 more loose 2 same 3 less loose
65	Scale I - Q 30	Sexually loose - I	1 not sure 2 fairly sure 3 sure
66	Scale I - Q 31	Initiative - C	1 less 2 same 3 more
67	Scale I - Q 32	Initiative - I	1 not sure 2 fairly sure 3 sure
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ABS-MR-Card 1

Col.	Scale/Item	Item Detail	Code
68	Scale I - Q 33	Self-support - C	1 less able 2 same 3 more able
69	Scale I - Q 34	Self-support - I	1 not sure 2 fairly sure 3 sure
70	Scale I - Q 35	MR prefer - C	1 with self 2 with normal 3 with all
71	Scale I - Q 36	MR prefer - I	1 not sure 2 fairly sure 3 sure
72	Scale I - Q 37	MR educ. - C	1 not important 2 uncertain 3 important
73	Scale I - Q 38	MR educ. - I	1 not sure 2 fairly sure 3 sure
74	Scale I - Q 39	Strict rules - C	1 more 2 same 3 less
75	Scale I - Q 40	Strict rules - I	1 not sure 2 fairly sure 3 sure
80	face sheet	Occupational or interest group	1 SER 2 elem teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

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ABS-MR-Card 2

Col.	Scale/Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
36	Scale II - Q 41	School playground - C	1 not approved 2 undecided 3 approved
37	Scale II - Q 42	School playground - I	1 not sure 2 fairly sure 3 sure
38	Scale II - Q 43	Visit homes - C	1 not approved 2 undecided 3 approved
39	Scale II - Q 44	Visit homes - I	1 not sure 2 fairly sure 3 sure
40	Scale II - Q 45	Camping trips - C	1 not approved 2 undecided 3 approved
41	Scale II - Q 46	Camping trips - I	1 not sure 2 fairly sure 3 sure
42	Scale II - Q 47	Simple learning - C	1 believed 2 undecided 3 not believed
43	Scale II - Q 48	Simple learning - I	1 not sure 2 fairly sure 3 sure
44	Scale II - Q 49	Stay overnight - C	1 not approved 2 undecided 3 approved

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ABS-MR-Card 2

Col.	Scale/Item	Item Detail	Code
45	Scale II - Q 50	Stay overnight - I	1 not sure 2 fairly sure 3 sure
46	Scale II - Q 51	Parties - C	1 not approved 2 undecided 3 approved
47	Scale II - Q 52	Parties - I	1 not sure 2 fairly sure 3 sure
48	Scale II - Q 53	Hired only if - C	1 approved 2 undecided 3 not approved
49	Scale II - Q 54	Hired only if - I	1 not sure 2 fairly sure 3 sure
50	Scale II - Q 55	Neighborhood - C	1 not approved 2 undecided 3 approved
51	Scale II - Q 56	Neighborhood - I	1 not sure 2 fairly sure 3 sure
52	Scale II - Q 57	Date - C	1 not approved 2 undecided 3 approved
53	Scale II - Q 58	Date - I	1 not sure 2 fairly sure 3 sure

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Code Book

ABS-MR-Card 2

Col.	Scale/Item	Item Detail	Code
54	Scale II - Q 59	Movies - C	1 not approved 2 undecided 3 approved
55	Scale II - Q 60	Movies - I	1 not sure 2 fairly sure 3 sure
56	Scale II - Q 61	Marry others - C	1 not approved 2 undecided 3 approved
57	Scale II - Q 62	Marry others - I	1 not sure 2 fairly sure 3 sure
58	Scale II - Q 63	Sterilized (males) - C	1 approved 2 undecided 3 not approved
59	Scale II - Q 64	Sterilized (males) - I	1 not sure 2 fairly sure 3 sure
60	Scale II - Q 65	Sterilized (females) - C	1 approved 2 not sure 3 not approved
61	Scale II - Q 66	Sterilized (females) - I	1 not sure 2 fairly sure 3 sure
62	Scale II - Q 67	Friends - C	1 not approved 2 not sure 3 approved
63	Scale II - Q 68	Friends - I	1 not sure 2 fairly sure 3 sure

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Code Book

~~ABS~~-MR-Card 2

Col.	Scale/Item	Item Detail	Code
64	Scale II - Q 69	Sex appeal - C	1 not so 2 not sure 3 usually so
65	Scale II - Q 70	Sex appeal - I	1 not sure 2 fairly sure 3 sure
66	Scale II - Q 71	Dangerous - C	1 usually 2 not sure 3 not usually
67	Scale II - Q 72	Dangerous - I	1 not sure 2 fairly sure 3 sure
68	Scale II - Q 73	Run machines - C	1 not approved 2 not sure 3 approved
69	Scale II - Q 74	Run machines - I	1 not sure 2 fairly sure 3 sure
70	Scale II - Q 75	Money,trusted -C	1 not usually 2 not sure 3 usually
71	Scale II - Q 76	Money,trusted - I	1 not sure 2 fairly sure 3 sure
72	Scale II - Q 77	No speech- C	1 not usually 2 not sure 3 usually
73	Scale II - Q 78	No speech- I	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 2

Code Book

Col.	Scale/Item	Item Detail	Code
74	Scale II - Q 79	Provide - self - C	1 usual 2 not sure 3 not usual
75	Scale II - Q 80	Provide - self - I	1 not sure 2 fairly sure 3 sure
80	face sheet	Occupational or interest group	1 SER 2 elem. teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

16 Code Book

ABS-MR-Card 3

Col.	Scale/ Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
36	Scale III - Q 81	Camping trip - C	1 wrong 2 undecided 3 right
37	Scale III- Q 82	Camping trip - I	1 not sure 2 fairlv sure 3 sure
38	Scale III - Q 83	Movies - C	1 wrong 2 undecided 3 right
39	Scale III - Q 84	Movies - I	1 not sure 2 fairly sure 3 sure
40	Scale III - Q 85	Visit overnight - C	1 wrong 2 undecided 3 right
41	Scale III - Q 86	Visit overnight - I	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
42	Scale III - Q 87	MR Party - C	1 wrong 2 undecided 3 right
43	Scale III - Q 88	MR Party - I	1 not sure 2 fairly sure 3 sure
44	Scale III - Q 89	El. Ed. Cost - C (gov. part)	1 wrong 2 undecided 3 right
45	Scale III - Q 90	El. Ed. Cost - I (gov. part)	1 not sure 2 fairly sure 3 sure
46	Scale III - Q 91	El. Ed. Cost - C (gov. all)	1 wrong 2 undecided 3 right
47	Scale III - Q 92	El. Ed. Cost - I (gov. all)	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
48	Scale III - Q 93	High School Cost - C (gov. all)	1 wrong 2 undecided 3 right
49	Scale III - Q 94	High School Cost - I (gov. all)	1 not sure 2 fairly sure 3 sure
50	Scale III - Q 95	Medical Cost - C (gov. part)	1 wrong 2 undecided 3 right
51	Scale III - Q 96	Medical Cost - I (gov. part)	1 not sure 2 fairly sure 3 sure
52	Scale III - Q 97	Medical Cost - C (gov. all)	1 wrong 2 undecided 3 right
53	Scale III - Q 98	Medical Cost - I (gov. all)	1 not sure 2 fairly sure 3 sure

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19 Code Book

ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
54	Scale III - Q 99	Food-Clothing - C (money)	1 wrong 2 undecided 3 right
55	Scale III - Q 100	Food-Clothing - I (money)	1 not sure 2 fairly sure 3 sure
56	Scale III - Q 101	Parties - C	1 wrong 2 undecided 3 right
57	Scale III - Q 102	Parties - I	1 not sure 2 fairly sure 3 sure
58	Scale III - Q 103	Date non-MR - C	1 wrong 2 undecided 3 right
59	Scale III - Q 104	Date non-MR - I	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
60	Scale III - Q 105	Movies non-MR - C	1 wrong 2 undecided 3 right
61	Scale III - Q 106	Movies non-MR - I	1 not sure 2 fairly sure 3 sure
62	Scale III - Q 107	Marry non-MR - C	1 wrong 2 undecided 3 right
63	Scale III - Q 108	Marry non-MR - I	1 not sure 2 fairly sure 3 sure
64	Scale III - Q 109	Soldier - C	1 wrong 2 undecided 3 right
65	Scale III - Q 110	Soldier - I	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
66	Scale III - Q 111	Protection - C (laws)	1 wrong 2 undecided 3 right
67	Scale III - Q 112	Protection - I (laws)	1 not sure 2 fairly sure 3 sure
68	Scale III - Q 113	Around City - C	1 wrong 2 not sure 3 right
69	Scale III - Q 114	Around City - I	1 not sure 2 fairly sure 3 sure
70	Scale III - Q 115	Sterilize - C (males)	1 right 2 not sure 3 wrong
71	Scale III - Q 116	Sterilize - I (males)	1 not sure 2 fairly sure 3 sure

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ABS-MR-Card 3

Col.	Scale/Item	Item Detail	Code
72	Scale III - Q 117	Seperate Classes - C	1 right 2 not sure 3 wrong
73	Scale III - Q 118	Seperate Classes - I	1 not sure 2 fairly sure 3 sure
74	Scale III - Q 119	Reserve Jobs - C	1 wrong 2 not sure 3 right
75	Scale III - Q 120	Reserve Jobs - I	1 not sure 2 fairly sure 3 sure
80	face sheet	Occupational or interest group	1 SER 2 elem. teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

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Code Book

ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
36	Scale IV-Q 121	Share Seat-C	1 no 2 don't know 3 yes
37	Scale IV-Q 122	Share Seat-I	1 not sure 2 fairly sure 3 sure
38	Scale IV 123	Fellow Worker-C	1 no 2 don't know 3 yes
39	Scale IV-Q 124	Fellow worker-I	1 not sure 2 fairly sure 3 sure
40	Scale IV-Q 125	Employee-C	1 no 2 don't know 3 yes
41	Scale IV-Q 126	Employee-I	1 not sure 2 fairly sure 3 sure

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24 Code Book

ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
42	Scale IV - Q 127	Live next to - C	1 no 2 don't know 3 yes
43	Scale IV - Q 128	Live next to - I	1 not sure 2 fairly sure 3 sure
44	Scale IV - Q 129	Party - C	1 no 2 don't know 3 yes
45	Scale IV - Q 130	Party - I	1 not sure 2 fairly sure 3 sure
46	Scale IV - Q 131	Dinner - C (house)	1 no 2 don't know 3 yes
47	Scale IV - Q 132	Dinner - I (house)	1 not sure 2 fairly sure 3 sure

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25 Code Book

ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
48	Scale IV - Q 133	Movies - C	1 no 2 don't know 3 yes
49	Scale IV - Q 134	Movies - I	1 not sure 2 fairly sure 3 sure
50	Scale IV - Q 135	Date - C	1 no 2 don't know 3 yes
51	Scale IV - Q 136	Date - I	1 not sure 2 fairly sure 3 sure
52	Scale IV - Q 137	Progeny-Date - C	1 no 2 don't know 3 yes
53	Scale IV - Q 138	Progeny-Date - I	1 not sure 2 fairly sure 3 sure

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Code Book

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ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
54	Scale IV-Q 139	Progeny-marry - C	1 no 2 don't know 3 yes
55	Scale IV-Q 140	Progeny-marry - I	1 not sure 2 fairly sure 3 sure
56	Scale IV-Q 141	Sexual ease - C	1 no 2 don't know 3 yes
57	Scale IV-Q 142	Sexual ease - I	1 not sure 2 fairly sure 3 sure
58	Scale IV-Q 143	Working with MR - C	1 no 2 don't know 3 yes
59	Scale IV-Q 144	Working with MR - I	1 not sure 2 fairly sure 3 sure

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Code Book

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ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
60	Scale IV-Q 145	MR VS other- C	1 no 2 don't know 3 yes
61	Scale IV-Q 146	MR VS other- I	1 not sure 2 fairly sure 3 sure
62	Scale IV-Q 147	MR/Emotion- C	1 no 2 don't know 3 yes
63	Scale IV-Q 148	MR/Emotion- I	1 not sure 2 fairly sure 3 sure
64	Scale IV-Q 149	Hire MR- C	1 no 2 don't know 3 yes
65	Scale IV-Q 150	Hire MR- I	1 not sure 2 fairly sure 3 sure

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28 Code Book

ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
66	Scale IV - Q 151	MR in class - C	1 no 2 don't know 3 yes
67	Scale IV - Q 152	MR in class - I	1 not sure 2 fairly sure 3 sure
68	Scale IV - Q 153	MR Sterilized - C	1 yes 2 don't know 3 no
69	Scale IV - Q 154	MR Sterilized - I	1 not sure 2 fairly sure 3 sure
70	Scale IV - Q 155	Seperate MR - C	1 yes 2 don't know 3 no
71	Scale IV - Q 156	Seperate MR - I	1 not sure 2 fairly sure 3 sure

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29 Code Book

ABS-MR-Card 4

Col.	Scale/Item	Item Detail	Code
72	Scale IV-Q 157	Care of MR - C (national)	1 no 2 don't know 3 yes
73	Scale IV-Q 158	Care of MR - I (national)	1 not sure 2 fairly sure 3 sure
74	Scale IV-Q 159	MR-Special class - C (regualr school)	1 no 2 don't know 3 yes
75	Scale IV-Q 160	MR-Special class - I	1 not sure 2 fairly sure 3 sure
80	face sheet	Occupational or interest group	1 SER 2 elem. teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

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30 Code Book

ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
36	Scale V[1] -Q 1	Disliking - C	1 more 2 same 3 less
37	Scale V-Q 2	Disliking - I	1 not sure 2 fairly sure 3 sure
38	Scale V-Q 3	Fearful - C	1 more 2 same 3 less
39	Scale V-Q 4	Fearful - I	1 not sure 2 fairly sure 3 sure
40	Scale V-Q 5	Horrified - C	1 more 2 same 3 less
41	Scale V- Q 6	Horrified - I	1 not sure 2 fairly sure 3 sure

[1]See page 15 of the U.S. 3968 version of the ABS-MR scale.

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Code Book

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ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
42	Scale V-Q 7	Loathing-C	1 more 2 same 3 less
43	Scale V-Q 8	Loathing-I	1 not sure 2 fairly sure 3 sure
44	Scale V-Q 9	Dismay-C	1 more 2 same 3 less
45	Scale V-Q 10	Dismay-I	1 not sure 2 fairly sure 3 sure
46	Scale V-Q 11	Hating-C	1 more 2 same 3 less
47	Scale V-Q 12	Hating-I	1 not sure 2 fairly sure 3 sure

Code Book

32

ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
48	Scale V-Q 13	Revulsion-C	1 more 2 same 3 less
49	Scale V-Q 14	Revulsion-I	1 not sure 2 fairly sure 3 sure
50	Scale V-Q 15	Contemptful-C	1 more 2 same 3 less
51	Scale V-Q 16	Contemptful-I	1 not sure 2 fairly sure 3 sure
52	Scale V-Q 17	Distaste-C	1 more 2 same 3 less
53	Scale V-Q 18	Distaste-I	1 not sure 2 fairly sure 3 sure

Code Book

33

ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
54	Scale V-Q 19	Sickened - C	1 more 2 same 3 less
55	Scale V-Q 20	Sickened - I	1 not sure 2 fairly sure 3 sure
56	Scale V-Q 21	Confused - C	1 more 2 same 3 less
57	Scale V-Q 22	Confused - I	1 not sure 2 fairly sure 3 sure
58	Scale V-Q 23	Negative - C	1 more 2 same 3 less
59	Scale V-Q 24	Negative - I	1 not sure 2 fairly sure 3 sure

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Code Book

34

ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
60	Scale V-Q 25	At ease - C	1 less 2 same 3 more
61	Scale V-Q 26	At ease - I	1 not sure 2 fairly sure 3 sure
62	Scale V-Q 27	Restless - C	1 more 2 same 3 less
63	Scale V-Q 28	Restless - I	1 not sure 2 fairly sure 3 sure
64	Scale V-Q 29	Uncomfortable - C	1 more 2 same 3 less
65	Scale V-Q 30	Uncomfortable - I	1 not sure 2 fairly sure 3 sure

35 Code Book

ABS-MR-Card 5

Col.	Scale/Item	Item Detail	Code
66	Scale V-Q 31	Relaxed - C	1 less 2 same 3 more
67	Scale V-Q 32	Relaxed - I	1 not sure 2 fairly sure 3 sure
68	Scale V-Q 33	Tense - C	1 more 2 same 3 less
69	Scale V-Q 34	Tense - I	1 not sure 2 fairly sure 3 sure
70	Scale V-Q 35	Bad - C	1 more 2 same 3 less
71	Scale V-Q 36	Bad - I	1 not sure 2 fairly sure 3 sure

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Code Book

36

ABS-MR-Card 5

Col.	Scale/Item	Item Scale	Code
72	Scale V-Q 37	Calm - C	1 Less 2 same 3 more
73	Scale V-Q 38	Calm - I	1 not sure 2 fairly sure 3 sure
74	Scale V-Q 39	Happy - C	1 less 2 same 3 more
75	Scale V-Q 40	Happy - I	1 not sure 2 fairly sure 3 sure
80	face sheet	Occupational or interest group	1 SER 2 elem. teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

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Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
36	Scale VI-Q 41	Shared Seat - C	1 no 2 uncertain 3 yes
37	Scale VI-Q 42	Shared Seat - I	1 no experience 2 unpleasant 3 in between 4 pleasant
38	Scale VI-Q 43	Eaten together - C	1 no 2 uncertain 3 yes
39	Scale VI-Q 44	Eaten together - I	1 no experience 2 unpleasant 3 in between 4 pleasant
40	Scale VI-Q 45	Same neighborhood - C (lived)	1 no 2 uncertain 3 yes
41	Scale VI-Q 46	Same neighborhood - I (lived)	1 no experience 2 unpleasant 3 in between 4 pleasant

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38 Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
42	Scale VI - Q 47	Worked together - C	1 no 2 uncertain 3 yes
43	Scale VI - Q 48	Worked together - I	1 no experience 2 unpleasant 3 in between 4 pleasant
44	Scale VI - Q 49	Boss - C	1 no 2 uncertain 3 yes
45	Scale VI - Q 50	Boss - I	1 no experience 2 unpleasant 3 in between 4 pleasant
46	Scale VI - Q 51	Worked for - C	1 no 2 uncertain 3 yes
47	Scale VI - Q 52	Worked for - I	1 no experience 2 unpleasant 3 in between 4 pleasant

39 Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
48	Scale VI - Q 53	Acquaintance - C	1 no 2 uncertain 3 yes
49	Scale VI - Q 54	Acquaintance - I	1 no experience 2 unpleasant 3 in between 4 pleasant
50	Scale VI - Q 55	Good Friends - C	1 no 2 uncertain 3 yes
51	Scale VI - Q 56	Good Friends - C	1 no experience 2 unpleasant 3 in between 4 pleasant
52	Scale VI - Q 57	Donated to help - C	1 no 2 uncertain 3 yes
53	Scale VI - Q 58	Donated to help - I	1 no experience 2 unpleasant 3 in between 4 pleasant

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40 Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
54	Scale VI - Q 59	Husband/Wife - C	1 no 2 uncertain 3 yes
55	Scale VI - Q 60	Husband/Wife - I	1 no experience 2 unpleasant 3 in between 4 pleasant
56	Scale VI - Q 61	Self/Similar - C	1 no 2 uncertain 3 yes
57	Scale VI - Q 62	Self/Similar - I	1 no experience 2 unpleasant 3 in between 4 pleasant
58	Scale VI - Q 63	Best Friend - C	1 no 2 uncertain 3 yes
59	Scale VI -Q 64	Best Friend - I	1 no experience 2 unpleasant 3 in between 4 pleasant

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41 Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
60	Scale VI - Q 65	Worked/Pay - C	1 yes 2 no
61	Scale VI - Q 66	Worked/Pay - I	1 no experience 2 unpleasant 3 in between 4 pleasant
62	Scale VI - Q 67	Children/Play - C	1 no 2 uncertain 3 yes
63	Scale VI - Q 68	Children/Play - I	1 no experience 2 unpleasant 3 in between 4 pleasant
64	Scale VI - Q 69	Children/School - C	1 no 2 uncertain 3 yes
65	Scale VI - Q 70	Children/School	1 no experience 2 unpleasant 3 in between 4 pleasant

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
66	Scale VI-Q 71	Extra taxes - C	1 no 2 not certain 3 yes
67	Scale VI-Q 72	Extra taxes - I	1 no experience 2 unpleasant 3 in between 4 pleasant
68	Scale VI-Q 73	Worked/Jobs - C	1 no 2 not certain 3 yes
69	Scale VI-Q 74	Worked/Jobs - I	1 no experience 2 unpleasant 3 in between 4 pleasant
70	Scale VI-Q 75	Sexually enjoyed - C	1 no 2 no answer 3 yes
71	Scale VI-Q 76	Sexually enjoyed - I	1 no experience 2 unpleasant 3 in between 4 pleasant

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43 Code Book

ABS-MR-Card 6

Col.	Scale/Item	Item Detail	Code
72	Scale VI - Q 77	Studied About - C	1 no 2 yes
73	Scale VI - Q 78	Studied About - I	1 no experience 2 unpleasant 3 in between 4 pleasant
74	Scale VI - Q 79	Worked/Teacher - C	1 no 2 yes
75	Scale VI - Q 80	Worked/Teacher - I	1 no experience 2 unpleasant 3 in between 4 pleasant
80	face sheet	Occupational or interest group	1 SER 2 elem. teachers 3 sec. teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

44 Code Book

ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
FIRST 35 COLUMNS SAME AS CARD 1 EXCEPT FOR COL. 8, CARD NO.			
		Life Situations Scale[1]	
36	Life Q 107	Eliminate war - C	1 Strongly disagree 2 disagree 3 agree 4 strongly agree
37	Life Q 108	Eliminate war - I	1 not sure 2 not very sure 3 fairly sure 4 very sure
38	Life Q 109	Luck/Fate - C	1 strongly agree 2 agree 3 disagree 4 strongly disagree
39	Life Q 110	Luck/Fate - I	1 not sure 2 not very sure 3 fairly sure 4 very sure

[1]See page 28 of the U.S. 3968 version of the ABS-MR scale. This scale is intended to measure Efficacy or man's sense of control over his environment. See Husen, J. (Ed.) International Study of Achievement in Mathematics. Vol. I, New York: John Wiley and Sons, 1967.

45 Code Book

ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
40	Life Q 111	Science Believe - C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
41	Life Q 112	Science Believe - I	1 not sure 2 not very sure 3 fairly sure 4 very sure
42	Life Q 113	Poverty Eliminate - C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
43	Life Q 114	Poverty Eliminate - I	1 not sure 2 not very sure 3 fairly sure 4 very sure
44	Life Q 115	Life/Length - C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
45	Life Q 116	Life/Length - I	1 not sure 2 not very sure 3 fairly sure 4 very sure

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46 Code Book

ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
46	Life Q 117	Deserts/Farming - C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
47	Life Q 118	Deserts/Farming - I	1 not sure 2 not very sure 3 fairly sure 4 very sure
48	Life Q 119	Educ./Change - C	1 strongly agree 2 agree 3 disagree 4 strongly disagree
49	Life Q 120	Educ./Change - I	1 not sure 2 not very sure 3 fairly sure 4 very sure
50	Life Q 121	Work succeeds - C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
51	Life Q 122	Work succeeds - I	1 not sure 2 not very sure 3 fairly sure 4 very sure

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ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
52	Life Q 123	Problems Solved-C	1 strongly disagree 2 disagree 3 agree 4 strongly agree
53	Life Q 124	Problems Solved-I	1 not sure 2 not very sure 3 fairly sure 4 very sure

Mental Retardation Knowledge Scale[1]

54	MR Q 125	Educating MR	1 handwork 2 vocational *3 practical 4 practice
55	MR Q 126 *	Occup. Trainning MR	1 entering high school 2 2nd year high school 3 last year high school *4 beginning of school

[1] Adapted from Haring, N. S., Stern, G. G., and Cruickshank, W. N., Attitudes of Educators toward Exceptional Children, Syracuse: Syracuse University Press, 1958.

[2] The correct answer to each item is starred. Seven of the items(starred ones) discriminate well between high and low scores on the scale and also have acceptable levels of "difficulty". These items(126, 127, 128, 130, 134, 139, 140) should be used as the MR Knowledge Scale in statistical analysis(see Harrelson, L. A facet theory analysis of attitudes toward the mentally retarded in the Federal Republic of Germany:Content, Structure, and Determinants, unpublished doctoral thesis, Michigan State University, 1969).

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ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
56	MR Q 127 *	Educ. Goal MR	* 1 social adequacy 2 academic prof. 3 occup. adequacy 4 occup. adj.
57	MR Q 128 *	Rejection of MR	1 poor learning * 2 behavior 3 dirty and poor 4 don't catch on
58	MR Q 129	Enot. needs MR	1 stronger * 2 same 3 not as strong 4 no concern
59	MR Q 130 *	Slow learner (placement)	* 1 regular class 2 special class 3 voc. arts. 4 reg. till 16
60	MR Q 131	Slow learner (in school)	1 successful * 2 failure 3 leader 4 aggressive

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49 Code Book

ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
61	MR Q 132	Slow learner (grades)	1 fail if indicated *2 grade to ability 3 grade no concern 4 grade to I.Q.
62	MR Q 133	Changing IQ	*1 can change 2 no change 3 change in older 4 change if early
63	MR Q 134 *	Comp. program MR	*1 diagnosis 2 facilities 3 psychiatrist 4 organization
64	MR Q 135	Physically MR	1 taller 2 shorter 3 heavier *4 average
65	MR Q 136	MR child	1 look different *2 need special ed. 3 never support self 4 cannot benefit

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Code Book

ABS-MR-Card 7

Col.	Scale/Item	Item Detail	Code
66	MR Q 137	MR becomes	1 craftsman 2 professional *3 semi-skilled 4 unemployable
67	MR Q 138	ED. Handicapped	1 average IQ 2 high IQ 3 low IQ *4 varied IQ
68	MR Q 139 *	Physically MR	1 inferior motor 2 superior motor 3 superior physical *4 average motor
69	MR Q 140 *	Public Reaction MR	1 rejecting *2 some acceptance 3 acceptance 4 covert rejection
70,71	MR Knowledge Scale	Knowledge about[1] MR (16 items)	1 to total number correct 16
72	MR Knowledge Scale	Knowledge about[2] MR (7 items)	1 to total number correct 16
80	Face sheet	Occupational or interest group	1 SER 2 elem teachers 3 sec teachers 4 parents 5 managers/executives 6 laborers 7 students 8 parents of non-retarded 9 professionals

[1]For U.S. groups 1-16 only (i.e. Ed. 200: 1-15 and Medical Class: no. 16).

[2]The seven "starred" items (i.e. 126, 127, 128, 130, 134, 139, and 140). These seven items should be used as the MR Knowledge Scale.

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A P P E N D I X 7

Variable List by Nation/Group

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ABS-MR: Basic Variable List by IBM Card and Column
Belize Study

Sample 1

		Variable[1]	Card	Column	Page	Item
Attitude Content	1.	Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2.	Normative	2	36,38 alter to 74	5-7	41,43 79
	3.	Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4.	Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5.	Feeling	5	36,38 alter to 74	15-17	1,3 39
	6.	Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8.	Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9.	Normative	2	37,39 alter to 75	5-7	42,44 80
	10.	Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11.	Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12.	Feeling	5	37,39 alter to 75	15-17	2,4 40
	13.	Action[7]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15.	Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16.	Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17.	MR Knowledge	7	54-69	30-32	125-140
Contact	18.	HP Amount	1-7	28	26	100
	19.	HP Avoid	1-7	29	26	101
	20.	HP Income	1-7	31	26	103
	21.	HP Alter.	1-7	32	27	104
	22.	MR Amount	1-7	33	27	105
	23.	MR Enjoy	1-7	34	27	106
Demographic	24.	Age	1-7	10	21	82
	25.	Educ. Amount	1-7	15	21	87
	26.	Religion Impor.	1-7	14	22	86
	27.	Religion Adher.	1-7	24	24	96
Change Orientation	28.	Self Change	1-7	16	22	88
	29.	Child Rearing	1-7	17	23	89
	30.	Birth Control	1-7	18	23	90
	31.	Automation	1-7	19	23	91
	32.	Political Lead.	1-7	20	23	92
	33.	Rule Adher.	1-7	25	25	97
Educ.	34.	Local Aid	1-7	21	24	93
	35.	Federal Aid	1-7	22	24	94
	36.	Ed. Planning	1-7	23	24	95
Categorical Data[2]	37.	Sex[5]	1-7	9	21	81
	38.	Ed. Contact Var.	1-7	11	21	83
	39.	Marital Status	1-7	12	22	84
	40.	Religion - Affil.	1-7	13	22	85
	41.	HP Category	1-7	26	25	98
	42.	HP Gain	1-7	30	26	102
Identity Data	43.	Nation (60)	1-7	1,2	none	none
	44.	Group (Adm.)	1-7	3,4	none	none
	45.	Subject no.	1-7	5-7	none	none
	46..	Card no.	1-7	8	none	none
	47..	Group (Occup.[6])	1-7	80	none	none

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female=1; male=2
[6]Groups (Col. 80)
2=RST
[7]Totals omitted but numbering system retained since computer program already wrtten.

ABS-MR: Basic Variable List by IBM Card and Column
Brazil (Harker) Study

Sample 2

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[9]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[9]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact[8]	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nations (62)	1-7	1,2	none	none
	44. Group (Adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group (Occup.[6])	1-7	80	none	none

[1]Based on ABS-MR 3968 edition

[2]Not used in r analysis

[3]K=Knowledge

[4]V=Value

[5]female=1; male=2

[6]Groups (Col.80)
1=SER
5=MAN
8=MNR

[7]HP amount - omitted in Brazil

[8]Contact=in Brazil refers only to MR

[9]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Colombia (Gottlieb) Study

Sample 3

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3 Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5 Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[7]	6	37,39 alter to 75	18-20	42,44 80
K[3] V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K3	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data	37. Sex [5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion -Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation	1-7	1,2	face	none
	44. Group (adm.)	1-7	3,4	face	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (occup.)	1-7	80	none	none

[1] Based on ABS-MR 3908 edition
[2] Not used in r analysis
[3] K=Knowledge
[4] V=Value
[5] female = 1; male = 2
[6] Groups (col. 80)
1=SER
2=RST-E
3=RST-S
combine as indicated
4=PMR
[7] Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Germany (Harrelson) Study

Sample 4

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[7]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (20)	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (Occup.)	1-7	80	none	none

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col. 80)
1=SER
2=RST
4=PMR
5=MAN
8=PNR
[7]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Israel (Chigier) Study

Sample 5

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[7]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (Occup.)	1-7	80	none	none

[1] Based on ABS-MR 3968 edition
[2] Not used in r analysis
[3] K=Knowledge
[4] V=Value
[5] female = 1; male = 2
[6] Groups (Col. 80)
1=SER
4=PMR
8=PNR
[7] Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Yugoslavia (Vurdelja) Study

Sample 6

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[7]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125 -140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26 Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (30)	1-7	1,2	same	same
	44. Group (adm.)	1-7	3,4	same	same
	45. Subject no.	1-7	5-7	same	same
	46. Card.no.	1-7	8	same	same
	47. Group[6] (Occup)	1-7	80	same	same

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col.80)
4=MMR (mothers)
8=MNR (mothers)

[7]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Kentucky (Cessna) Study

Sample 7

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 79
	2. Normative	2	36,38 alter to 74	5-7	41,43
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (02)	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (Occup)	1-7	80	none	none

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col. 80)
1=SER
2=RST
5 =MAN
[7]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Michigan (Green) Study

Sample 8

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (62)	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (Occup.)	1-7	80	none	none

[1] Based on ABS-MR 3968 edition
[2] Not used in r analysis
[3] K=Knowledge
[4] V=Value
[5] female = 1; male = 2
[6] Groups (Col. 80)
4=PMR
8=PNR
[7] Totals omitted but numbering sytem retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Texas (Morin) Study

Sample 9

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[7]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (04)	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group[6] (Occup.)	1-7	80	none	none

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col. 80)
1=SER
2=RST
4=PMR
8=PNR
[7]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
School Diagnostican Study

Sample 10

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[8]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[8]	6	37,30 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (01)	1-7	1,2	none	none
	44. Group(adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group (Occup.[6])	1-7	80	none	none

[1]Based on ABS-MR 3968 edition.
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col. 80)
9=school diagnosticans
[7]Group (Col's. 3,4)
Adm.=90
[8]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
ED 200 Study

Sample 11

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[8]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling[8]	5	37,39 alter to 75	15-17	2,4 40
	13. Action	6	37,39 alter to 75	18-20	42,44 80
V[4]	15 Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor.	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32 Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (01)	1-7	1,2	none	none
	44. Group (adm.)[7]	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group no. (occup)[6]	1-7	80	none	none

[1]Based on ABS-MR 3968 edition
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Groups (Col. 80)
7=student
[7]adm. group (col's. 3,4)
1-15 (class sessions)
[8]Totals omitted but numbering system retained since computer program already written.

ABS-MR: Basic Variable List by IBM Card and Column
Medical Class Study

Sample 12

	Variable[1]	Card	Column	Page	Item
Attitude Content	1. Stereotype	1	36,38 alter to 74	2-4	1,3 alter to 39
	2. Normative	2	36,38 alter to 74	5-7	41,43 79
	3. Moral Evaluation	3	36,38 alter to 74	8-11	81,83 119
	4. Hypothetical	4	36,38 alter to 74	12-14	121,123 159
	5. Feeling	5	36,38 alter to 74	15-17	1,3 39
	6. Action[8]	6	36,38 alter to 74	18-20	41,43 79
Attitude Intensity	8. Stereotype	1	37,39 alter to 75	2-4	2,4 40
	9. Normative	2	37,39 alter to 75	5-7	42,44 80
	10. Moral Evaluation	3	37,39 alter to 75	8-11	82,84 120
	11. Hypothetical	4	37,39 alter to 75	12-14	122,124 160
	12. Feeling	5	37,39 alter to 75	15-17	2,4 40
	13. Action[8]	6	37,39 alter to 75	18-20	42,44 80
V[4]	15. Efficacy - Cont.	7	36,38 alter to 52	28,29	107,109 123
	16. Efficacy - Int.	7	37,39 alter to 53	28,29	108,110 124
K[3]	17. MR Knowledge	7	54-69	30-32	125-140
Contact	18. HP Amount	1-7	28	26	100
	19. HP Avoid	1-7	29	26	101
	20. HP Income	1-7	31	26	103
	21. HP Alter.	1-7	32	27	104
	22. MR Amount	1-7	33	27	105
	23. MR Enjoy	1-7	34	27	106
Demographic	24. Age	1-7	10	21	82
	25. Educ. Amount	1-7	15	21	87
	26. Religion Impor	1-7	14	22	86
	27. Religion Adher.	1-7	24	24	96
Change Orientation	28. Self Change	1-7	16	22	88
	29. Child Rearing	1-7	17	23	89
	30. Birth Control	1-7	18	23	90
	31. Automation	1-7	19	23	91
	32. Political Lead.	1-7	20	23	92
	33. Rule Adher.	1-7	25	25	97
Educ.	34. Local Aid	1-7	21	24	93
	35. Federal Aid	1-7	22	24	94
	36. Ed. Planning	1-7	23	24	95
Categorical Data[2]	37. Sex[5]	1-7	9	21	81
	38. Ed. Contact Var.	1-7	11	21	83
	39. Marital Status	1-7	12	22	84
	40. Religion - Affil.	1-7	13	22	85
	41. HP Category	1-7	26	25	98
	42. HP Gain	1-7	30	26	102
Identity Data	43. Nation (01)	1-7	1,2	none	none
	44. Group (adm.)	1-7	3,4	none	none
	45. Subject no.	1-7	5-7	none	none
	46. Card no.	1-7	8	none	none
	47. Group (occup[6])	1-7	80	none	none

[1]Based on ABS-MR 3968 edition.
[2]Not used in r analysis
[3]K=Knowledge
[4]V=Value
[5]female = 1; male = 2
[6]Group (Col. 80)
7=students
[7]Group (Col. 3,4)
16=class no.
[8]TOTALS omitted but numbering system retained since computer program already written.

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